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A STUDY OF EXPENSES OF CITY SCHOOL SYSTEMS

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By HARLAN UPDEGRAFF

SPECIALIST IN SCHOOL ADMINISTRATION
BUREAU OF EDUCATION



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LETTER OF TRANSMITTAL.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, February 14, 1912.

SIR: It is of the greatest importance that careful attention be given to the expenditures made by all governmental agencies. The expenses of certain cities rival in amounts the expenses of State governments. From 20 to 50 per cent of the expenses of cities go to the support of the public schools. Over \$200,000,000 are expended annually by the city school systems of the United States. Doubtless thousands of dollars of this amount might be saved each year if each city knew the proportion in which other cities are distributing their money among the various school activities and the unit cost for each activity. Likewise, cities which are confining their endeavors within a too narrow range, or which are spending too little upon a particular object, will have these facts revealed. Dr. Updegraff's study, transmitted herewith, furnishes just such information for 103 cities of 30,000 inhabitants or over. It establishes tentative norms for cities of this size. Its value, however, is not confined to these larger cities alone. It provides a method for the treatment of similar statistics of smaller cities, towns, and rural districts. A superintendent or a fiscal officer may take such data as are found in national and State educational reports, and by following the method observed in this monograph may ascertain the true relation of the expenses of his own system to such others as he desires to include in his study. I therefore recommend the publication of it as a bulletin of this office.

Very respectfully,

P. P. CLAXTON,
Commissioner.

A STUDY OF EXPENSES OF CITY SCHOOL SYSTEMS.

The object of this bulletin is threefold: (1) To provide those charged with the administration of public schools in the largest cities of the United States the means of making exact comparisons of cost between any two or more cities, with a minimum of effort; (2) to establish certain standards by which any item of expense of any city of 30,000 population or over may be measured and by means of which comparisons of expenses of this and future years may be made; (3) and to present certain conclusions regarding urban education which a study of the statistics seems to establish.

Current expenses, or "expenses," include the costs of conducting a business or an enterprise of any sort which involves expenditures. Set over against expenses are capital outlays. Under this latter head are the costs of the original plant and its extensions and their equipment. Payments to sinking and other funds, interest, and similar payments are not embraced in either of the above classes.

The basal data used in this study were gathered by agents of the Bureau of the Census, who personally visited the fiscal offices of the cities included and with the assistance of those in charge compiled the statistics from the account books and vouchers. The data as reported to the Census Office were placed at the disposal of the Bureau of Education.

The fiscal years of city school systems are not uniform; in fact, there is the greatest diversity in this particular. The closing dates of the fiscal years included in this study lie between July 1, 1908, and June 30, 1909.

The 103 cities of 30,000 population or over whose expenses are presented in the study are divided into four groups. Group I is composed of cities of 300,000 population or over in 1910; Group II, of cities of 100,000 to 300,000; Group III, of cities of 50,000 to 100,000; and Group IV, of cities of 30,000 to 50,000. The number of cities in each of the respective groups is as follows: 13, 20, 42, 28. The total number of cities in the United States in 1910 above 30,000 in population was 184, distributed among the various groups as follows: 18, 32, 59, 75. This study includes, therefore, practically two-thirds of the cities in the first three groups (72 per cent, 60 per cent, and 71 per cent), and one-third (37.5 per cent) of the cities in

the fourth group. Each group is sufficiently full to warrant valid conclusions respecting each group alone and its relations to the other groups.

The cities appear in the order of their population in 1910. Each city bears the same number throughout all the tables.

CLASSIFICATION OF TABLES.

The principal tables are grouped as follows:

1. The basal tables containing seven financial tables showing in detail the cost of each kind of expense for each city. (Tables 16 to 22.)

2. The percentage tables, containing six tables showing in detail for each city the percentage which each kind of expense is of the entire expense. (Tables 23 to 28.)

3. The average cost tables (two tables), showing in detail for each city the annual cost per pupil, based on enrollment, of each kind of expense for instruction, operation, and maintenance of elementary and secondary schools. (Tables 29 and 30.)

4. One table showing the per capita cost of school expenses based upon population, the comparative cost of school expenses and city expenses, and of school expenses and expenses for police. (Table 31.)

5. One table comparing the total costs of elementary and secondary schools in each city. (Table 32.)

The various items of school expenses are classified in these tables under the following heads:

1. Expenses of general control.

2. Expenses of instruction, operation, and maintenance of elementary schools.

3. Expenses of instruction, operation, and maintenance of secondary schools.

4. Expenses of instruction, operation, and maintenance of normal, evening, vocation, and special schools (totals only).

5. Combined expenses of instruction, operation, and maintenance of schools of all kinds.

6. Miscellaneous expenses.

One table is devoted to each of these heads in both the basal and percentage tables. Only heads 2 and 3 are represented in the average cost tables, because satisfactory units of measure were not available for the other items. The actual costs of kindergartens are segregated in a separate table. But because many cities do not separate the expenses of kindergartens and elementary schools, it is not possible to make a fair comparison of the expenses of all the cities for these classes of schools separately. They are therefore combined with the expenses of the elementary schools, and no computation is made of percentages and average costs of kindergartens.

The classification of items under each of these heads is not in accord with the classification of the new standard fiscal schedule of the Bureau of Education as adopted by the Department of Superintendence of the National Education Association. The tables were completed before the new schedule had been framed, but after the time when it was clear that the arrangement of the Census Office schedule would not longer prevail. It was thought best to place certain items under miscellaneous expenses rather than to incur the risk of finding them misplaced later under one of the more important heads. Of these items, school census and elections, and truant officers and police have been placed in the new schedule under "General control," insurance has been assigned to "maintenance of school plant," while medical inspection and nurses, and transportation of pupils have been placed, together with libraries, in a new division called "Auxiliary agencies."

No differentiation has been made between expenses of instruction, operation, and maintenance, for the reason that the definition of the items in accordance with which the basal statistics were collected made it impossible.

GENERAL METHOD OF TREATMENT.

It has come to be generally accepted that the way in which to give the clearest and at the same time the most accurate measure of a series of numbers is to state the median of the series and the limits of the middle 50 per cent. In time past the arithmetical mean or average has been used for this purpose, and it still has its value. Nevertheless its disadvantages, especially that of the undue weight exercised by a number which is very large or very small as compared with the others in the series, are causing the increased use of the median wherever practicable.

The determination of the median and of the middle 50 per cent requires first the arrangement of numbers or values in a series according to their amounts and then the numbering of the series, beginning with the lowest. The median is the amount above and below which one-half of the members of the series falls. In other words, it is the middle one (halfway between the two next the middle in case the number of things is even) of the things involved, distributed in the order of their amounts or values. Thus, if the number of cases or things were 17, the ninth case would be the median, because there would be 8 above and 8 below it. If the number of cases were 16 the median would be obtained by finding the halfway point between the value of case 8 and case 9.

The middle 50 per cent is found by various methods. The method followed in this study is one of the simplest. By the term as it is here used is meant the two limits between which are found those

cases, amounting to one-half the total number, that are nearest the median, one-half the middle 50 per cent of the cases being below the median, the other half above it. For example, if the number of cases were 16, cases 5 to 12, inclusive, would compose the middle 50 per cent, and the amounts of these cases give the limits of the middle 50 per cent. When the number of cases is such that the upper and lower limits of the middle 50 per cent fall between two numbers, the half-way points between them are taken as the limits.¹

The medians and the limits of the middle 50 per cent for each column are given by groups in the first lines of each table.

The second feature of the general method of treatment is the "ranking" of the various amounts in each column by groups. The "rank" of an item is its place in the series as arranged for the determination of the median and the middle 50 per cent, as just described, the item lowest in value being given rank 1, the next to the lowest rank 2, and so on. In other words, the "ranks" are the result of the process of the numbering of the series, which necessarily precedes the determination of the median and the middle 50 per cent. No element of comparative worth is attached to the numbers given. In some items, as in fuel, it is creditable to a city to have a low number; in others, a high number. The purpose for the insertion of the columns entitled "rank" in the tables is merely to facilitate the comparison of items.

BASAL TABLES.

The basal tables (16 to 22) contain the actual expenses, in dollars, for each city. The remaining groups of tables are based upon them, either in whole or in part, and serve to interpret more clearly the facts therein presented. All comparisons of actual costs must be made from this table.

The principal tables in this group are: 16, which gives the costs of general control subdivided according to the different functions which operate in this field; 17, which gives the expenses of instruction, operation, and maintenance of the elementary school subdivided into the different purposes for which the expenses were incurred; 18, which gives the same for the secondary school; 19, which gives the total expenses for instruction, operation, and maintenance of city training schools, of evening schools, of vacation schools, and of special schools, without reference to the particular purpose for which various expenses making up the totals were incurred; and 21, which gives the expenses for various miscellaneous activities and objects. Table 20 has been introduced in order to bring together in one table the totals of the amounts spent for each of the various objects in the operation and maintenance of all the types of schools included in

¹ While this method of fixing the limits of the middle 50 per cent is not in strict accord with the most refined technical practice, it approximates the truth within fairly close limits. Those desiring to work out these limits more accurately will find the tables of frequencies for the most important items on pages 23-26.

17, 18, and 19. In 22 are segregated those items of expenses included in 17 which were incurred on account of kindergartens.

Speaking roughly, the \$56,000,000 expended for all educational purposes by these cities were distributed as follows: General control, \$2,000,000; elementary schools, \$43,000,000; secondary schools, \$8,000,000; training, evening, vacation, and special schools, \$1,000,000; miscellaneous purposes, \$1,000,000. Distributing the cost of the elementary, secondary, normal, evening, vacation, and special schools (\$52,500,000 in all) among the various objects for which the expenses were incurred, we find that \$40,000,000 were spent for teaching and supervision, \$2,000,000 for textbooks and supplies, \$4,000,000 for janitors, \$3,000,000 for other expenses of operation, and \$3,500,000 for repairs and replacements. The accompanying table shows the correct percentage of the total expenses for each educational activity and each kind of expense just mentioned.

TABLE 1.—*Per cent of total expenses for all cities combined.*

Tables.	Items.	Per cent.
16	General control.....	3.45
17	Elementary schools.....	76.20
18	Secondary schools.....	14.93
19	Normal, evening, vacation, and special schools.....	2.75
21	Miscellaneous expenses.....	2.67
	Total.....	100.00
16	Total expenses, general control.....	3.45
20	Salaries of teachers, all schools.....	68.92
20	Salaries and expenses of supervision, all schools.....	2.15
20	Textbooks, stationery, and general school supplies, all schools.....	3.43
20	Janitors, engineers, and firemen, all schools.....	6.92
20	Other expenses of operation, all schools.....	5.23
20	Apparatus and equipment, including repairs and replacements thereof, all schools....	1.57
20	Repairs to buildings.....	5.66
21	Miscellaneous expenses.....	2.67
	Total.....	100.00

These percentages may be accepted as indicating present standards for all cities in the United States of 30,000 population and over. In other words, if all schools in this country were maintained by the Federal Government, Congress would have to appropriate money for their support in proportions approximating those given in this table. This does not mean that each group of cities or each city would or could conform to this scheme. The extent to which variation does occur, as well as the extent to which variation may occur without the necessity of any explanation in order to establish its reasonableness, will appear in the discussion of the next group of tables.

PERCENTAGES OF TOTAL SCHOOL EXPENSES.

The tables containing percentages (Tables 23–28) are practically the same in form as the basal tables (Tables 16–22). Every space in the basal tables has a corresponding space in the percentage tables

in which is shown for each amount its per cent of the total school expenses of the city to which it relates. A column entitled "rank," the purpose of which, as well as the method of using it, is explained upon page 10, is placed by the side of each percentage column.

The median and the upper and lower limits of the middle 50 per cent (see p. 62) for each group are found together at the top of each table.

There are two fundamental questions in a comparative study of the school expenses of cities: First, are the expenses distributed as in other cities? Second, how do the unit costs for the various kinds of expenses compare? The tables in this group furnish the material for the consideration of the first question.

Caution regarding the use of the percentage tables.—Certain limitations upon the value of the conclusions based upon these percentage tables must not be overlooked. While they provide the most convenient method for comparing all kinds of expenses within a single city and the best means for comparing the distribution of expenses of different cities, they do not take into account the differences in the scale or standard of expense upon which cities conduct their systems. A city of low-expense standard and a city of high-expense standard are upon the same plane. Furthermore, while they do reveal every instance of disproportion or departure from mean percentages, it does not follow that such disproportions are improper, for in fact many of them can be justified. All that an instance of disproportion demands is that those in charge shall be able to make such justification. This can frequently be done by reference to the average-cost tables. For example, a high percentage of expenses for salaries of teachers in high schools may be justified partially or wholly if the average cost per pupil for that instruction does not vary far from the average.

Costs of operation likewise need to be interpreted by means of units for measuring such expenses. As these have not yet been generally adopted, such data as are available concerning the size, structure, age of buildings, and similar conditions must be taken into account in a rough manner in judging of the relative proportions spent for operation.

From all this follows the general principle that all percentage tables showing the distribution of expenses must be checked by reference to the average-cost tables and relative data.

Again, the percentage tables do not take into account the absence of any particular class of expenditure, as for special schools or vacation schools. As the total percentage for all kinds of expenses equals 100 in every instance, it follows that those cities which have a limited range of educational activity have a relatively larger percentage for the more common fields of expenditure. However, as the cities of

each group vary comparatively little in the scope of their work and as the amounts expended for the newer activities is relatively small, it follows that for practical purposes little or no account need be taken of the differences caused by this fact.

The standard of comparison.—If all cities had exactly the same conditions surrounding the conduct of public schools and if all cities chose to meet these conditions in just the same way, the distribution of expenses would be practically the same in all. But as conditions are not the same and as school administration varies more or less, what limit should be set up for determining whether a city is in accord with or is an exception to the prevailing practice? The answer to this question is that the city which lies in the middle of the list of percentages arranged in order of amount may be taken as best representing the group, and that all expense accounts can be fairly called regular or proportionate if they fall in the middle 50 per cent of the list of percentages. Such is the standard used in this study. It may be found desirable, however, in applying this standard to some cities to include some percentages that are on the margin. This is due partially to the simplicity of the methods used in determining the middle 50 per cent.

METHOD OF USING THE PERCENTAGE TABLES.

Comparison of percentages of cities in the same group for one kind of expense.—The relative position of any city as compared with other cities of the same group, in regard to the percentage of total school expenses incurred for any particular purpose may be quickly determined from the percentage tables in the following manner: After noting the percentage for the item in question together with the rank for the same, reference should then be made to the median and the upper and lower limits of the middle 50 per cent, as given at the top of the table, and their respective ranks. The next step is to determine the relation of the rank of the city to the ranks of the median and of the limits of the middle 50 per cent for the group to which the city belongs. If the digit indicating the rank of the city is less than the digit for the median of the group of cities, the city has a less percentage than the group of cities taken as a whole; and if the digit is more the percentage is higher. If the digit is less than that of the lower limit of the middle 50 per cent or more than the upper limit the expenses may be considered as exceptionally low or exceptionally high.

Comparison of distribution of expenses in one city with distribution of expenses in other cities of the same group.—This may be done in a cursory manner by extending the process just indicated to all items and forming a rough judgment as to the items in which the city is

low or high as compared with the group as a whole. The more accurate method consists in computing the differences between the percentages of the various classes of expenses for the city and the corresponding medians and arranging the excesses and deficiencies in separate lists. As those items that vary most from the medians are of greatest importance, and as variation from the median to the extent of the limits of the middle 50 per cent may be regarded as normal, the computation of differences in cases wherein the city's percentage is within the limits of the middle 50 per cent may be for all practical purposes neglected. The following table presents the result of such a computation for the city of Washington:

TABLE 2.—Differences between the various percentages that lie outside the middle 50 per cent, and the median percentages for the same items, for Washington, D. C.

Rank	Number of cases.	Deficiencies.	Amount of deficiencies below median.	Rank.	Number of cases.	Excesses.	Amount of excess above median.
3	11	Superintendent's office....	.23	9	11	Supervision of elementary schools.	1.62
2	13	Salaries of elementary school teachers.	7.41	10	13	Textbooks, stationery, and supplies of elementary schools.	.83
3	11	Repairs and replacements of equipment, elementary schools.	.30	13	13	Fuel, elementary schools.	.75
3	12	Evening schools.....	1.04	12	12	Repairs to buildings, elementary schools.	3.69
1	9	Truant officers and police..	.32	12	13	Salaries of secondary school teachers.	3.65
2	8	Payments to schools and institutions.	.47	8	8	Supervision of secondary schools.	.81
				10	10	Apparatus and manual training equipment, secondary schools.	.33
				11	12	Repairs to buildings, secondary schools.	.27
				11	12	Rent.....	.86

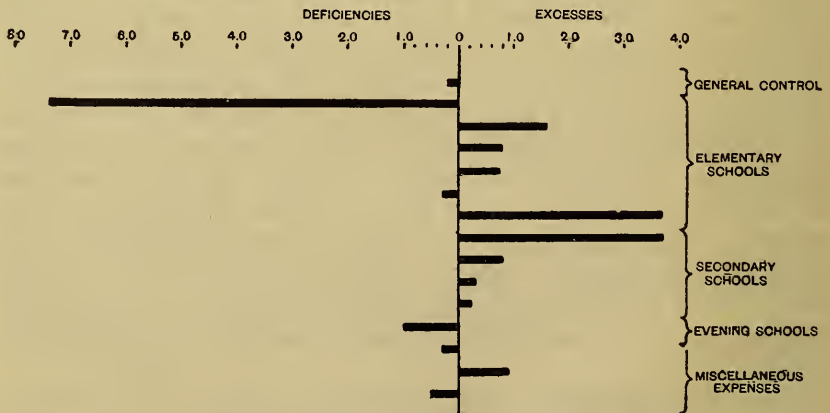


FIG. 1.—Differences between the various percentages of total expenses that lie outside the limits of the middle 50 per cent, and the median percentages for the same items, for Washington, D. C., based on Table 2.

Having arranged the facts in tabular form and illustrated them by a diagram similar to the above, the next step in a rational consideration of such facts is to determine in which cases such differences from the normal percentages are justifiable. For, as has been said, peculiar conditions in many cases may either justify large percentages or require the keeping of expenses within low amounts. In order that this process may be more clearly understood, a possible explanation of the variations in the case of Washington is here presented.

Let us start with the percentage in Table 2, that shows the largest deficiency—salaries of elementary school teachers. It has been said above that a high percentage for salaries of teachers would be justified if the average cost per pupil were near the normal. It is likewise true that a low percentage for salaries of teachers could not be considered as contrary to the best interests of the schools if the average costs for salaries were not below the normal. The average costs for elementary teachers in Washington is \$21.24 or 88 cents above the median, as shown in Table 29. The deficiency in percentage may not, therefore, be considered as unreasonable or contrary to the best interests of the schools. Such contrast of a relatively low percentage on the one hand and of a relatively high average cost on the other presents an interesting situation. Unusually large amounts must have been spent for other purposes than salaries of elementary teachers in order to make so high an average cost appear so small in the percentage tables or else the number of pupils per teacher must have been unusually small. As the attendance statistics show the number of pupils per teacher to be only slightly below the normal, it follows that certain other expenses must be unusually high. The excess side of Table 2 seems to bear out this conclusion.

Let us now turn to those items in which excesses appear in order to see whether they may be justified. Table 51 shows that the average cost per pupil for salaries of teachers in secondary schools lies next to the median cost. Table 31 shows that the enrollment in secondary schools is larger than that of any city in the group except Chicago. It would seem, therefore, as though the large percentage for this purpose was entirely justified. A larger percentage for supervision of elementary and secondary schools is unavoidable in Washington because of the duplication of positions and salaries in the schools for white and colored pupils. The school buildings of Washington are for the most part small buildings—the eight-room building being the most frequent. This naturally increases the cost of operation and maintenance. It would seem, however, since repairs and fuel for elementary school buildings cost more proportionately than in any other city, and since repairs of secondary school buildings cost more than in any other city but one, that economy could be brought about in these particulars. The same may be said with regard to rent, for Baltimore,

whose expenditures in this line are notorious, is the only city whose percentage exceeds Washington's. Coming back again to the deficiency side of the table, small appropriations for evening schools have led a number of teachers to give their services voluntarily, and small appropriations for truant officers have led to voluntary activities in this regard as well. The figures demonstrate the need of increased appropriations for these last two purposes in order that Washington may have an organization which approximates the standard of other cities.

Comparison of percentages of any one city with like percentages of all cities of 30,000 population and over included in this study.—This may be done in the same manner as indicated above for comparison with cities in the same group by using the medians and the limits of the middle 50 per cent for all cities as presented in the following table:

TABLE 3.—*Medians and limits of middle 50 per cents of percentages for entire list of 103 cities.*

	Medians.	Lower limit of middle 50 per cents.	Upper limit of middle 50 per cents.
TABLE 23.			
Column 1.....	0.875	0.480	1.510
2.....	.800	.250	1.400
3.....	1.870	1.315	2.590
4.....	.515	.200	.820
5.....	3.200	2.440	4.405
TABLE 24.			
Column 1.....	54.030	50.470	58.420
13.....	76.640	73.065	79.075
TABLE 25.			
Column 1.....	11.850	9.770	14.120
13.....	16.430	13.525	18.740
TABLE 27.			
Column 1.....	68.170	64.425	71.310
2.....	2.270	1.190	4.000
3.....	3.560	1.870	5.100
4.....	6.770	5.715	7.845
5.....	3.420	2.320	4.540
6.....	.420	.270	.630
7.....	.440	.250	.690
8.....	1.075	.690	2.080
9.....	.700	.350	1.250
10.....	.250	.080	.460
11.....	.790	.430	1.750
12.....	5.130	3.415	7.170
13.....	94.530	92.975	95.590
TABLE 28.			
Column 1.....	.190	.145	.340
2.....	.395	.250	.545
3.....	.320	.190	.400
4.....	.760	.410	.910
5.....	.310	.120	.550
6.....	.470	.225	.980
7.....	.160	.080	.290
8.....	.530	.270	1.300
9.....	.240	.100	.750
10.....	2.150	1.200	2.960

The accompanying tables of distribution of percentages for the most important items for the entire list of cities make possible a comparison which shows more definitely the relation of any city to every other city as regards one particular item of expense. For example, suppose we wish to ascertain the relative position of Baltimore as regards the per cent of total expenses devoted to salaries of elementary teachers. By referring to Table 24, column 1, we note that the per cent for this purpose is 58.5. Then, by consulting Table 4 below, we ascertain that this per cent lies in the eighth step; that there are 18 cities in all having per cents lying between 57.50 and 59.99; and that 66 cities have per cents lower than 57.50 and 17 cities have higher per cents than 59.99. These facts may be presented graphically in the same manner as a comparison of ratios of total expenses to population given in figure 8.

TABLE 4.—Distribution of percentages of total school expenses expended for various purposes.

A. FOR SUPERINTENDENT'S OFFICE. (See Table 23, column 3.)

Per cent of total school expenses.	Number of cities.	Per cent of total school expenses.	Number of cities.
Less than 0.50.....	2	2.50 to 2.99.....	13
0.50 to 0.99.....	14	3.00 to 3.49.....	9
1.00 to 1.49.....	15	3.50 to 3.99.....	4
1.50 to 1.99.....	25	4.00 to 4.50.....	3
2.00 to 2.49.....	17		

B. GENERAL CONTROL. (See Table 23, column 5.)

Less than 1.00.....	1	5.00 to 5.99.....	7
1.00 to 1.99.....	13	6.00 to 6.99.....	5
2.00 to 2.99.....	32	7.00 to 7.99.....	1
3.00 to 3.99.....	24	8.00 to 8.99.....	3
4.00 to 4.99.....	16	9.00 to 9.99.....	1

C. SALARIES OF ELEMENTARY TEACHERS. (See Table 24, column 1.)

Below 42.50.....	1	55.00 to 57.49.....	9
42.50 to 44.99.....	2	57.50 to 59.99.....	18
45.00 to 47.49.....	9	60.00 to 62.49.....	9
47.50 to 49.99.....	9	62.50 to 64.99.....	5
50.00 to 52.49.....	16	65.00 to 67.49.....	3
52.50 to 54.99.....	20	Above 67.50.....	2

D. TOTAL EXPENSES OF ELEMENTARY SCHOOLS. (See Table 24, column 13.)

Below 65.00.....	3	75.00 to 77.49.....	24
65.00 to 67.49.....	0	77.50 to 79.99.....	22
67.50 to 69.99.....	9	80.00 to 82.49.....	10
70.00 to 72.49.....	11	82.50 to 84.99.....	4
72.50 to 74.99.....	16	85.00 to 87.49.....	4

TABLE 4.—*Distribution of percentages of total school expenses expended for various purposes—Continued.*

E. SALARIES OF SECONDARY TEACHERS. (See Table 25, column 1.)

Per cent of total school expenses.	Number of cities.	Per cent of total school expenses.	Number of cities.
Below 6.00.....	2	12.00 to 13.99.....	20
6.00 to 7.99.....	7	14.00 to 15.99.....	17
8.00 to 9.99.....	18	16.00 to 17.99.....	9
10.00 to 11.99.....	26	18.00.....	3

F. TOTAL EXPENSES OF SECONDARY SCHOOLS. (See Table 25, column 13.)

7.50 to 9.99.....	8	17.50 to 19.99.....	21
10.00 to 12.49.....	14	20.00 to 22.49.....	8
12.50 to 14.99.....	22	22.50 to 24.99.....	7
15.00 to 17.49.....	21	25.00 to 27.50.....	2

G. SALARIES OF TEACHERS OF ALL SCHOOLS. (See Table 27, column 1.)

52.5 to 54.9.....	1	67.5 to 69.9.....	22
55.0 to 57.4.....	4	70.0 to 72.4.....	17
57.5 to 59.9.....	1	72.5 to 74.9.....	11
60.0 to 62.4.....	10	75.0 to 77.4.....	2
62.5 to 64.9.....	14	77.5 to 80.0.....	2
65.0 to 67.4.....	17	Above 80.0.....	2

H. SUPERVISION OF ALL SCHOOLS. (See Table 27, column 2.)

Less than 1.00.....	15	6.00 to 6.99.....	2
1.00 to 1.99.....	24	7.00 to 7.99.....	2
2.00 to 2.99.....	18	8.00 to 8.99.....	2
3.00 to 3.99.....	5	9.00 to 9.99.....	3
4.00 to 4.99.....	5	10.00 and over.....	5
5.00 to 5.99.....	4		

I. TEXT-BOOKS, STATIONERY, AND SCHOOL SUPPLIES OF ALL SCHOOLS. (See Table 27, column 3.)

Less than 1.00.....	9	5.00 to 5.99.....	14
1.00 to 1.99.....	17	6.00 to 6.99.....	8
2.00 to 2.99.....	17	7.00 to 7.99.....	5
3.00 to 3.99.....	17	8.00 to 8.99.....	1
4.00 to 4.99.....	12	9.00 to 9.99.....	1

J. FUEL FOR ALL SCHOOLS. (See Table 27, column 5.)

Less than 1.00.....	5	5.00 to 5.99.....	13
1.00 to 1.99.....	12	6.00 to 6.99.....	1
2.00 to 2.99.....	22	7.00 to 7.99.....	3
3.00 to 3.99.....	26	8.00 to 8.99.....	1
4.00 to 4.99.....	18		

K. INSTRUCTION, OPERATION, AND MAINTENANCE OF ALL SCHOOLS. (See Table 27, column 13.)

Below 84.00.....	1	92.00 to 93.99.....	23
84.00 to 85.99.....	2	94.00 to 95.99.....	46
86.00 to 87.99.....	1	96.00 to 97.99.....	14
88.00 to 89.99.....	3	98.00 to 100.00.....	1
90.00 to 91.99.....	7		

COMPARISON OF PERCENTAGES OF EXPENSES BETWEEN GROUPS OF CITIES.

It is not within the scope of this study to present elaborate comparisons between the various groups of cities respecting the differences in the percentages expended for various purposes, although the material for such comparison is furnished. It will doubtless prove of practical assistance, however, to administrators of public education to point out certain differences between the cities in this respect. For this purpose the medians alone may be taken, or the medians supplemented by the upper and lower limits of the middle 50 per cent.

The following conclusions relating to the differences in the distribution of the expenses in different sized cities seem to be established. The second group presents in many cases, however, an exception to the general rule.

(1) The larger the city the greater is the proportion of expenses incurred for—

(a) Salaries of elementary school teachers.

(b) Total cost of instruction, operation, and maintenance of elementary schools.

(c) Total cost of instruction, operation, and maintenance of all schools.

(2) The smaller the city the greater is the proportion of expenses incurred for—

(a) Superintendent's office.

(b) Total expense of general control.

(c) Supervisors of elementary schools.

(d) Salaries of teachers in secondary schools.

(e) Total cost of instruction, operation, and maintenance of secondary schools.

(f) Janitors, engineers, and firemen for elementary, secondary, and all schools.

(g) Fuel for elementary, secondary, and all schools.

(h) Repairs for elementary schools and all schools.

THE AVERAGE COSTS PER PUPIL FOR CERTAIN PRINCIPAL ITEMS OF EXPENSE.

This group contains two tables, 29 and 30. They correspond to the basal and percentage tables that deal with the expenses of elementary and secondary schools (Tables 17 and 18, 24 and 25). The tables are identical in form with the corresponding percentage tables. The average costs are based on enrollment.¹ While this is not the best

¹The enrollment figures may be found in Table 32; also the closing date of the fiscal year for each city.

unit for measuring costs of school systems, it is the best that was available. It is not likely, however, that the relative costs are materially different from what they would be if a different attendance unit had been used. Average daily attendance has come to be generally recognized as the best unit, although it has its limitations. While the percentage tables emphasize the expenses of a school system as a whole and the proportion of the total devoted to the costs of the various objects of expenditures, the average cost tables emphasize the individual items of expense and the economical expenditure of the same. In the former each item exists as a part of a whole and the total of the percentages for each city equals 100 per cent. In the latter, each kind of expense is measured by itself.

Cities whose fiscal years ended before December, 1909, are not included in these tables for the reason that it did not seem proper in computing the average costs to divide the expenses for the year ended previous to December 1 by the enrollment for the school year 1908-9. Neither did it seem permissible to compare average cost of certain cities for 1908, which might have been obtained for the cities in question by using the enrollment figures for 1907-8 with the average cost of the cities for 1908-9. It therefore seemed necessary to omit these cities altogether.

Caution regarding the use of average cost tables.—One danger in using average costs deserves attention. If a city has a low average cost for any particular purpose as compared with other cities, the natural tendency is to say at once without reference to other items of expense that the amount expended for that purpose should be increased up to the normal amount for cities of that same class. Take the average amount per pupil expended for salaries of teachers in the elementary schools of Baltimore—\$13.75. The table shows that this is the lowest average cost for this purpose of all cities in the group. Those who are interested in this one item might very likely go no further in their study of school expenses, but would conclude at once that a clear case had been made out in favor of increasing the amount paid teachers in elementary schools as much as \$6.41 per pupil, in which circumstance the amount expended would be the median or average cost for the group.

But those who have the administration of schools in charge must look to all items of expense and must maintain a proper balance between them. The percentage tables furnish the data for ascertaining this balance and all consideration of the increase in the average cost of any item of expense must be considered in the light of its effect upon the correct balance between all items of expense as determined by an analysis of the percentage tables in accordance with the method suggested in the previous section. Continuing with the example referred to in the paragraph above, the percentage tables

tell us that the proportion of school moneys paid to the elementary teachers of Baltimore is much larger than the median amount for cities of the same group, and that 8 of the 13 cities devote a less percentage to this purpose.

This does not mean that the salaries should not be raised, for they should. The salary schedule for the elementary schools in Baltimore is among the lowest of all the largest cities in the country. But it does mean that there are other features of the operation and maintenance of the schools of Baltimore which must not be overlooked.

The items that should receive the greatest attention in such a balancing between expenditures are those which are lowest or highest comparatively in relation to the percentages of other cities. Baltimore percentages for supervision and for wages of janitors are the lowest for all the cities. Admitting that the salaries of elementary teachers are too low, is it in this item that the increased expenditures are needed most in order to bring about the maintenance of the best school system, and in order to recompense all who are serving it in a manner which most nearly approaches equitable amounts? As determined by the standard set by cities of the same class the answer is "No." Baltimore needs to spend more money for supervision before spending more money for teachers in order to have the best balanced system, and should in equity pay more to her janitors before increasing the salaries of her teachers. But the need for increasing the salaries of teachers from the absolute point of view is certainly clear; the figures merely prove that the items of supervision and wages of janitors need it more. The final conclusion of the whole matter is that Baltimore in order to put her school system on a plane of efficiency as high as other cities must increase her income for schools up to the point where normal expenditures may be made for all these purposes.

The conclusion of all this discussion is that action should never be based on a comparison of average costs alone, and that the percentage tables furnish a proper corrective. The ideal is to keep total average costs and percentages of total expenses as near the median as possible, and within the limit of the middle 50 per cent, making due allowance for local conditions which may rightfully cause extreme variations.

Average cost per pupil for school purposes also has very direct relations with the average cost per population (ratio of school expense to population) and the ratio of school expenses to expenses of the city as a whole.

METHOD OF USING THE AVERAGE-COST TABLES.

These average-cost tables may be used in the same way as the percentage tables. Data relating to average cost may be gathered and illustrated according to the methods presented in the discussion of the percentage item. The average cost in one city for any one

kind of expenses may be compared with the average costs of other cities in the same group by noting its relation to the median and the middle 50 per cent. (See p. 62.) A logical outcome of such a comparison is the estimation of the amount of increased resources that would be required to bring an expense in any city up to the median, or vice versa, of the amount that would have to be deducted in order to bring the expense down to the median. This may be done by obtaining the difference between the median average cost of the city and multiplying it by the number of pupils enrolled. (See Table 32.) As an example, let us continue the discussion of the average cost of salaries of elementary teachers in Baltimore. The average cost per pupil for this purpose was \$13.95, while the median average cost for the group was \$20.36. The difference, \$6.41, multiplied by the enrollment—76,500, approximately—gives close to \$500,000 as the additional amount required to bring Baltimore's expenses up to the median of the cities of Group I.

Comparison of all average costs may be carried out by the method shown on p. 17 for percentages of total expenses. The accompanying table, which brings together all the facts relating to average costs of the elementary schools of Baltimore, is given as an illustration of a variation of the method suggested in connection with percentages. The computations given have been performed roughly in order that the method might be the more clearly apprehended.

Table 5 gives a comparison of average costs of different kinds of expenses of elementary schools in Baltimore with median expenses of Group I, together with computation of amounts necessary to bring Baltimore's expenses up to the standard of other cities. The enrollment is figured as 76,500 in every item.¹

TABLE 5.—*Comparison of school expenses of Baltimore with those of other cities.*

Items.	Median average costs, all cities in Group I.	Baltimore's average costs.	Differences.	Increased expense required.
Total expenses.....	\$26.54	\$18.71	\$7.83	\$600,000
Salaries, teachers'.....	20.36	13.95	6.41	500,000
Supervision.....	.365	.04	.325	25,000
Janitors', engineers', etc., salaries.....	1.73	1.32	.41	34,000
Janitors' supplies and sundry expenses of maintenance and operation.....	.37	Trace.	.37	28,000
Libraries.....	.05	.00	.05	4,000
Apparatus and manual training equipment.....	.09	.03	.06	4,500
Repairs and replacement of equipment.....	.20	.14	.06	4,500

¹ This table was prepared by the author for the *Commission appointed to study the system of education in the public schools of Baltimore* and appeared in report upon p. 42.

Comparison of any average cost of any city with the average costs of all cities by use of the tables of frequencies and accompanying diagram may be made in the same way as in the case of percentages. (See p. 17.) Tables of frequencies for the most important average costs follow.

TABLE 6.—Distribution of average costs, per pupil enrolled, of various expenses involved in the instruction, operation, and maintenance of elementary schools. (See Table 29.)

A. SALARIES OF TEACHERS.

Average costs.	Cities of—				
	Group I.	Group II.	Group III.	Group IV.	All cities.
\$8-\$8.99				1	1
\$9-\$9.99					
\$10-\$10.99		1	1	2	4
\$11-\$11.99					1
\$12-\$12.99		1	2	3	6
\$13-\$13.99	1		4	2	7
\$14-\$14.99	1	1	5	3	10
\$15-\$15.99		2	2	1	4
\$16-\$16.99		2	4	1	7
\$17-\$17.99		2	1	2	5
\$18-\$18.99	1	3	1	1	6
\$19-\$19.99		2	2	1	5
\$20-\$20.99	4	1	1		6
\$21-\$21.99	2		2		4
\$22-\$22.99			1		1
\$23-\$23.99					
\$24-\$24.99		1			1
\$25-\$25.99					
\$26-\$27	1				1

B. SUPERVISION.

Below \$0.20	2	3	2	1	8
\$0.20-\$0.39	2	3	7	7	19
\$0.40-\$0.59	2	1	2		6
\$0.60-\$0.79		1	3	2	6
\$0.80-\$0.99					
\$1-\$1.19	1		2	1	4
\$1.20-\$1.39					
\$1.40-\$1.59		1		1	2
\$1.60-\$1.79					
\$1.80-\$1.99	1			1	2
\$2-\$2.19			1		1
\$2.20-\$2.39			1		1
\$2.40-\$2.59			1		1
\$2.60-\$2.79		1			1
\$2.80-\$2.99					
\$3-\$3.20			1		1

C. TEXTBOOKS, STATIONERY, AND GENERAL SUPPLIES.

Below \$0.20	1	2	1	3	7
\$0.20-\$0.39	1	1	1	1	4
\$0.40-\$0.59	1	3	5	3	12
\$0.60-\$0.79		4	3	1	8
\$0.80-\$0.99	4	2	2	2	10
\$1-\$1.19	1		7	2	10
\$1.20-\$1.39		1	1	2	4
\$1.40-\$1.59	1		2	2	5
\$1.60-\$1.79		1	2	1	4
\$1.80-\$1.99	1	1	1		3
\$2-\$2.20			1		1

D. SALARIES OF JANITORS, ENGINEERS, AND FIREMEN.

\$0.40-\$0.59			1		1
\$0.60-\$0.79					
\$0.80-\$0.99		2	2	3	7
\$1-\$1.19			4	1	5
\$1.20-\$1.39	3	2	2	1	8
\$1.40-\$1.59	1	2	5	1	9
\$1.60-\$1.79	2	2	4	2	10
\$1.80-\$1.99	1	1	4	3	9
\$2-\$2.19		3	2	6	11
\$2.20-\$2.39	1	1	2		4
\$2.40-\$2.59	1				1
\$2.60-\$2.79			1		1
\$2.80-\$2.99					
\$3-\$3.19		2			2
\$3.20-\$3.40	1				1

TABLE 6.—Distribution of average costs, per pupil enrolled, of various expenses involved in the instruction, operation, and maintenance of elementary schools—Continued.

E. FUEL.

Average costs.	Cities of—				
	Group I.	Group II.	Group III.	Group IV.	All cities.
Below \$0.20.....				1	1
\$0.20-\$0.39.....	2	4	3	1	10
\$0.40-\$0.59.....	1	2	4	3	10
\$0.60-\$0.79.....	4	1	6	2	13
\$0.80-\$0.99.....	2	1	8	3	14
\$1-\$1.19.....		2	3	1	6
\$1.20-\$1.39.....	1	3		2	6
\$1.40-\$1.59.....		2	1	2	5
\$1.60-\$1.80.....			2	1	3

F. REPAIRS OF BUILDINGS.

\$0.20-\$0.39.....			1	2	3
\$0.40-\$0.59.....		2	2	2	6
\$0.60-\$0.79.....	1	1	5	1	8
\$0.80-\$0.99.....	1	1	2		4
\$1-\$1.19.....	1	2	3		6
\$1.20-\$1.39.....	1	2	3	2	8
\$1.40-\$1.59.....	2		1	3	6
\$1.60-\$1.79.....	1		1	3	5
\$1.80-\$1.99.....		4	1	1	6
\$2-\$2.19.....			1	1	2
\$2.20-\$2.39.....					1
\$2.40-\$2.59.....	1		1		2
\$2.60-\$2.79.....			1		1
\$2.80-\$2.99.....					
\$3-\$3.19.....		3	1		4
\$3.20-\$3.39.....					
\$3.40-\$3.60.....	1				1

G. TOTAL EXPENSE OF INSTRUCTION, OPERATION, AND MAINTENANCE OF ELEMENTARY SCHOOLS.

\$11-\$11.99.....				1	1
\$12-\$12.99.....					
\$13-\$13.99.....		1	1		2
\$14-\$14.99.....				1	1
\$15-\$15.99.....		1	1		2
\$16-\$16.99.....			1	2	3
\$17-\$17.99.....					
\$18-\$18.99.....	1	1	3	3	8
\$19-\$19.99.....			2	1	3
\$20-\$20.99.....			2		2
\$21-\$21.99.....		1	5	1	7
\$22-\$22.99.....	1	1	4	3	9
\$23-\$23.99.....	1	3		1	5
\$24-\$24.99.....		1		1	2
\$25-\$25.99.....	1	2	2	2	7
\$26-\$26.99.....	2	1	3	1	7
\$27-\$27.99.....	1				1
\$28-\$28.99.....	1	1			2
\$29-\$29.99.....		1	2		3
\$30-\$30.99.....			1		1
\$31-\$31.99.....	1	1			2
\$32-\$32.99.....					
\$33-\$34.....	1				1

TABLE 7.—Distribution of average costs, per pupil enrolled, of various expenses involved in the instruction, operation, and maintenance of secondary schools. (See Table 30.)

A. SALARIES OF TEACHERS.

Average costs.	Cities of—				
	Group I.	Group II.	Group III.	Group IV.	All cities.
\$20-\$22.49.....		1	2	2	5
\$22.50-\$24.99.....		2	1	2	5
\$25-\$27.49.....				1	1
\$27.50-\$29.99.....			2	5	7
\$30-\$32.49.....	1	1		2	4
\$32.50-\$34.99.....		2	6	2	10
\$35-\$37.49.....	1	3	5		9
\$37.50-\$39.99.....		1	5		6
\$40-\$42.49.....		1		1	2
\$42.50-\$44.99.....	1	1	1		3
\$45-\$47.49.....		2	3		5
\$47.50-\$49.99.....	2				2
\$50-\$52.49.....				1	1
\$52.50-\$54.99.....	2			1	3
\$55-\$57.49.....	1				1
\$57.50-\$59.99.....		1			1
\$60-\$62.49.....					1
\$62.50-\$64.99.....	1				1
\$65-\$67.49.....	1		1		2
\$67.50-\$70.00.....			1		1

B. TEXTBOOKS, STATIONERY, AND GENERAL SCHOOL SUPPLIES.

\$0.49.....	1	5	1	3	10
\$0.50-\$0.99.....	1		3	2	6
\$1-\$1.49.....	1		2		3
\$1.50-\$1.99.....		1	2	3	6
\$2-\$2.49.....	1	2	1	3	7
\$2.50-\$2.99.....	2	2	2	1	7
\$3-\$3.49.....	1	1			2
\$3.50-\$3.99.....	1	1	4	2	8
\$4-\$4.49.....		1	3		4
\$4.50-\$4.99.....			1		1
\$5-\$5.49.....		1	1		2
\$5.50-\$5.99.....	1		1	2	4
\$6 and over.....	1		3		4

C. SALARIES OF JANITORS, ENGINEERS, AND FIREMEN.

\$1-\$1.24.....		1	2		3
\$1.25-\$1.49.....		1		3	4
\$1.50-\$1.74.....			2	1	3
\$1.75-\$1.99.....		2	2	1	5
\$2-\$2.24.....			2	3	5
\$2.25-\$2.49.....	1	2	2	1	6
\$2.50-\$2.74.....	2	1	2	1	6
\$2.75-\$2.99.....	2	1	4		7
\$3-\$3.24.....		2	2	2	6
\$3.25-\$3.49.....			1		1
\$3.50-\$3.74.....		1	1		2
\$3.75-\$3.99.....	1	1	1		3
\$4-\$4.24.....	1	1	2	2	6
\$4.25-\$4.49.....			1	2	3
\$4.50-\$4.74.....					
\$4.75-\$4.99.....	1				1
\$5-\$5.24.....			1		1
\$5.25-\$5.49.....	1	1			2
\$5.50-\$5.74.....		1			1
\$5.75-\$5.99.....					
\$6 and over.....	1		2	1	4

TABLE 7.—*Distribution of average costs, per pupil enrolled, of various expenses involved in the instruction, operation, and maintenance of secondary schools—Continued.*

D. FUEL.

Average costs.	Cities of—				
	Group I.	Group II.	Group III.	Group IV.	All cities.
Below \$0.20.....		1			1
\$0.20-\$0.39.....	1	1	1		3
\$0.40-\$0.59.....		1	3	2	6
\$0.60-\$0.79.....	1	1	2		4
\$0.80-\$0.99.....	2	1	2	1	6
\$1-\$1.19.....	1	2	2	2	7
\$1.20-\$1.39.....		2	6	1	9
\$1.40-\$1.59.....	2	1	3	2	8
\$1.60-\$1.79.....	2		2	2	6
\$1.80-\$1.99.....		1	3	1	5
\$2-\$2.19.....		1	1	1	3
\$2.20-\$2.39.....	1	1	1	1	4
\$2.40-\$2.59.....			1	1	2
\$2.60-\$2.79.....					
\$2.80-\$2.99.....					
\$3 and over.....		1		2	3

E. REPAIRS TO BUILDINGS.

\$0.25-\$0.49.....			2	1	3
\$0.50-\$0.74.....		1	3	1	5
\$0.75-\$0.99.....		1	1	1	3
\$1-\$1.24.....	1	1	2	3	7
\$1.25-\$1.49.....		1	4		5
\$1.50-\$1.74.....		2		2	4
\$1.75-\$1.99.....		2			2
\$2-\$2.24.....	1	1	3	1	6
\$2.25-\$2.49.....	1	1	1	2	5
\$2.50-\$2.74.....	1	2	1	1	5
\$2.75-\$2.99.....	1				1
\$3-\$3.24.....	1				1
\$3.25-\$3.49.....	1				1
\$3.50-\$3.74.....	1		1		2
\$3.75-\$3.99.....					
\$4-\$4.24.....			1		1
\$4.25-\$4.49.....					
\$4.50-\$4.74.....	1				1
\$4.75-\$4.99.....		1	1		2
\$5 and over.....			3	1	4

F. TOTAL EXPENSE OF INSTRUCTION, OPERATION, AND MAINTENANCE.

\$25-\$29.99.....		2	2	3	7
\$30-\$34.99.....		1			1
\$35-\$39.99.....		1	1	6	8
\$40-\$44.99.....		2	7	3	12
\$45-\$49.99.....	2		5	2	11
\$50-\$54.99.....		3	4		7
\$55-\$59.99.....	2	1	2	1	6
\$60-\$64.99.....	2	1	2		5
\$65-\$69.99.....	1	1	1	2	5
\$70-\$79.99.....	1	1			2
\$80-\$89.99.....	2		1		3
\$90-\$100.....			2		2

The following conclusions are based on comparisons of the average costs of the same kinds of expenses in the different groups of cities:

1. The larger the city the greater the average cost per pupil enrolled of—
 - (a) Total cost of instruction, operation, and maintenance of elementary schools.
 - (b) Salaries of elementary-school teachers.
 - (c) Janitors of elementary schools.
 - (d) Repairs of elementary schools.
 - (e) Total cost of instruction, operation, and maintenance of secondary schools.
 - (f) Salaries of secondary-school teachers.
 - (g) Janitors of secondary schools.
 - (h) Repairs of secondary schools.
2. There is no apparent tendency in the variation of the average cost of—
 - (a) Textbooks, stationery, and general school supplies of elementary schools.
 - (b) Fuel of elementary and secondary schools.

TOTAL SCHOOL EXPENSES AS COMPARED WITH POPULATION, TOTAL CITY EXPENSES, AND EXPENSES OF POLICE DEPARTMENT.

Table 31 gives a comparison of the total expenses of schools (1) with the population, (2) with the total city expenses, (3) with the expenses of the police department.

The total city expenses and the expenses of the police department have been obtained from Table 4 of Special Reports of the Bureau of the Census: Statistics of cities, 1908 (pp. 116-163). The population figures were obtained from the same source (pp. 343-345). The expenses of schools are the same as in the first column of Table 16.

Comparison of cities of the same group.—Each of the three items expressing comparative values—expenses of schools per capita of population,¹ ratio of total school expenses to city expenses, and ratio of total school expenses to expenses of the police department—may be used in the same way in making comparisons. A rough comparison may be made by noting their respective ranks and the relation of the rank of each to the ranks of the median and of the limits of the middle 50 per cent. This comparison may be made more accurately and more impressively by the preparation of diagrams. Baltimore is again taken as the city with which to illustrate this method of comparison.

¹ Largely for the sake of convenience the cost per capita, expressed as an abstract number, is hereafter referred to also as the ratio of school expenses to population.

The revised estimates of population in June, 1908, as made by the Census Office, have been used in making this computation. This estimate for Baltimore is 549,017.

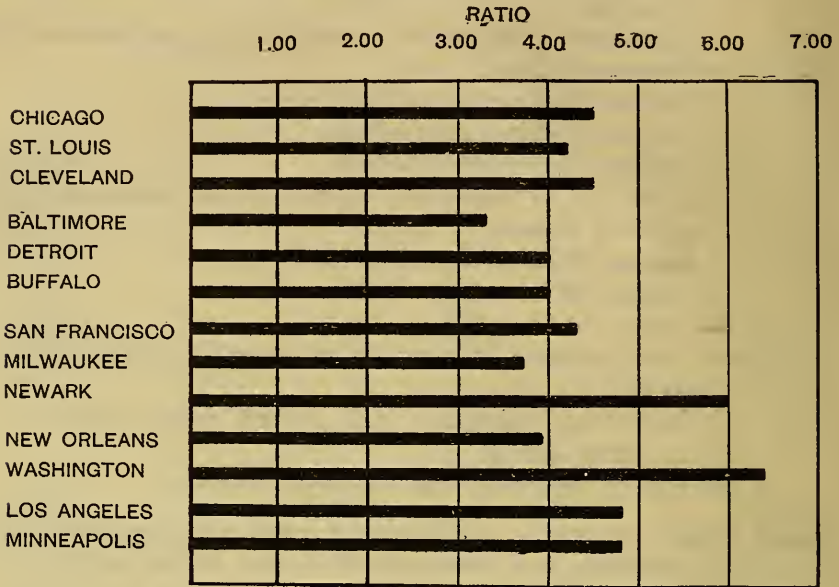


FIG. 2.—Ratio of school expenses to population in cities of Group I.

These ratios may also be read as cost per capita of population. For example, the cost per capita of population of all school expenses in Detroit was \$4.¹ A comparison of the relative amounts of school expenses and of total city expenses in these 13 cities shows that Detroit expended for school purposes a larger percentage of the total city expenses than 8 cities and a smaller percentage than 4. The median or average percentage was 25.9; Detroit's percentage was 28. In other words, in the average, or normal city, 25.9 cents out of every dollar expended for all municipal purposes went for schools, while in Detroit 28 cents were so expended. The following diagram presents these facts:

These ratios may also be read as the number of cents in each dollar of city expenses that was expended for schools. For example, San Francisco expended 20 cents out of every dollar of city expenses upon its schools.¹ A comparison of expenses for schools and for police in these 13 cities shows that 1 city spent a smaller relative amount for schools than St. Louis, while 11 cities were relatively more liberal. For every dollar spent for police, St. Louis spent only \$1.41 for

¹ Figures 2, 3, and 4 were prepared for the report of the *Commission appointed to study the system of education in the public schools of Baltimore*, pp. 34-36.

schools, while the median or average city spent \$2.12. The following diagram presents the facts:

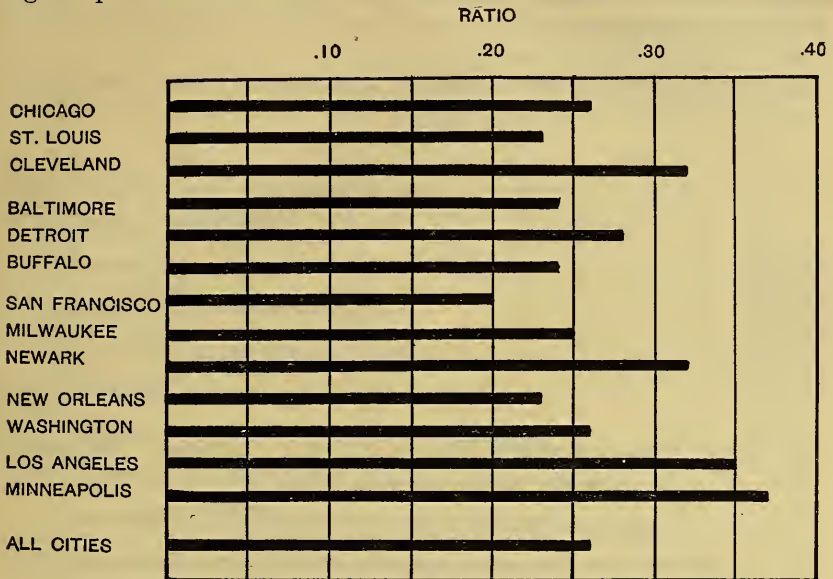


FIG. 3.—Ratio of school expenses to total city expenses in cities of Group I.

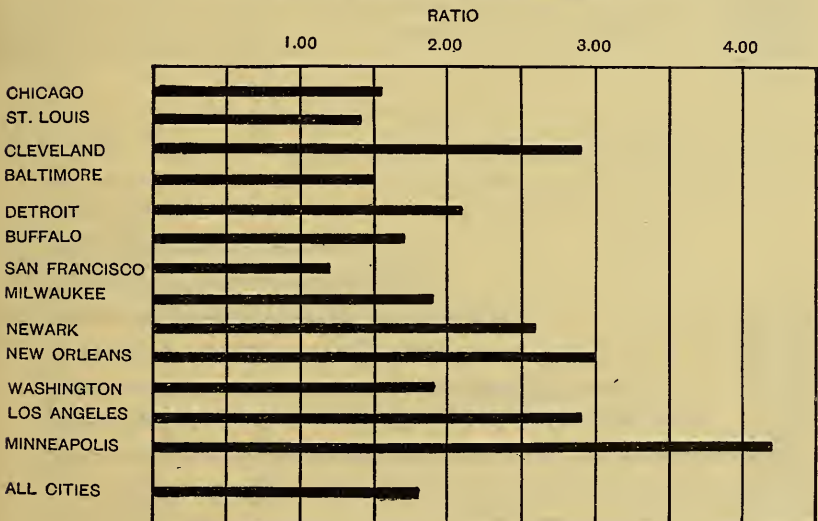


FIG. 4.—Ratio of school expenses to expenses for police in cities of Group I.

These ratios may be read as number of dollars spent for schools for each dollar that was spent for police. For example, Baltimore expended one dollar and fifty cents upon its schools for every dollar spent for police.¹

¹ Figures 2, 3, and 4 were prepared for the report of the Commission appointed to study the system of education in the public schools of Baltimore, pp. 34-36.

In order that a comparison of any city with those of the same group or with all may be facilitated the following tables of frequencies have been prepared:

TABLE 8.—*Distribution of ratios of total school expenses to population. (See Table 31.)*

Ratio.	Number of cities.				
	Group I.	Group II.	Group III.	Group IV.	Total.
1.50 to 1.99.....			3		3
2.00 to 2.49.....			2	2	4
2.50 to 2.99.....	1	3	3	5	12
3.00 to 3.49.....	1		10	4	15
3.50 to 3.99.....	2	4	8	6	20
4.00 to 4.49.....	3	7	6	6	22
4.50 to 4.99.....	4	3	5	2	14
5.00 to 5.49.....		2	1	3	6
5.50 to 5.99.....		1	2		3
6.00 to 6.49.....	2		2		4

TABLE 9.—*Distribution of ratios of school expenses to total city expenses. (See Table 31.)*

Ratio.	Number of cities.				
	Group I.	Group II.	Group III.	Group IV.	Total.
.15 to .199.....			3	1	4
.20 to .249.....	5	2	2	2	11
.25 to .299.....	4	2	3	1	10
.30 to .349.....	2	8	11	7	28
.35 to .399.....	2	4	6	7	19
.40 to .449.....		3	10	4	17
.50 to .549.....		1	7	3	11
.55 to .599.....				3	3

TABLE 10.—*Distribution of ratios of school expenses to expenses for police. (See Table 31.)*

Ratio.	Number of cities.				
	Group I.	Group II.	Group III.	Group IV.	Total.
1.00 to 1.49.....	3		4	1	8
1.50 to 1.99.....	3			2	5
2.00 to 2.49.....	2	3	6	2	13
2.50 to 2.99.....	3	4	6	1	14
3.00 to 3.49.....	1	5	6	4	16
3.50 to 3.99.....		1	6	2	9
4.00 to 4.49.....	1	1	4	3	9
4.50 to 4.99.....		1	4	3	8
5.00 to 5.49.....			2	3	5
5.50 to 5.99.....			1	1	2
6.00 to 6.49.....		1	1	4	6
6.50 to 6.99.....					
7.00 to 7.49.....		1	2		3
7.50 to 7.99.....				1	1
8.00 to 8.49.....				1	1

The following diagrams represent graphically the facts in the above tables relating to (1) ratio of school expenses to population in all cities; (2) ratio of school expenses to total city expenses in all cities; (3) ratio of school expenses to expenses for police in all cities. The lines are drawn to represent the middle point in each step of the

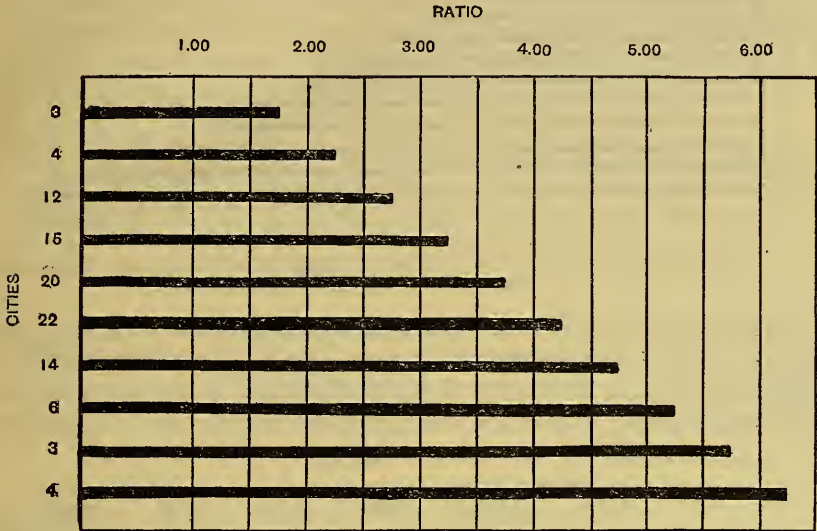


FIG. 5.—Frequencies of various ratios of school expenses to population in all cities. These ratios may be read as cost per capita of population.

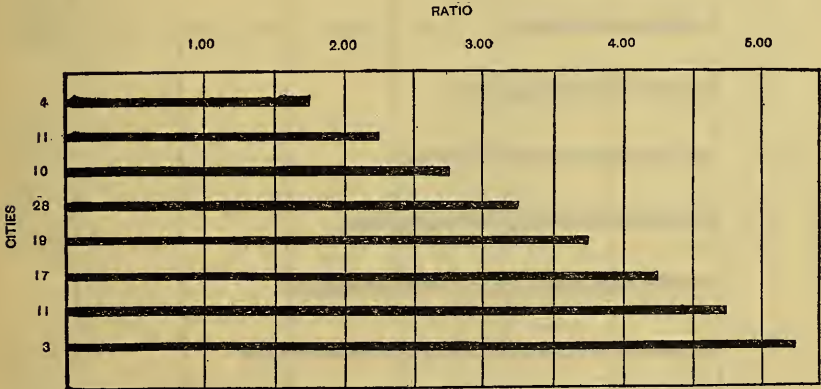


FIG. 6.—Frequencies of various ratios of school expenses to total city expenses in all cities. These ratios may be read as the number of cents in each dollar of city expenses there was expended for schools.

list of ratios. Thus, in the first table mentioned the first line is drawn to represent \$1.75 as the middle point between \$1.50 and \$1.99.

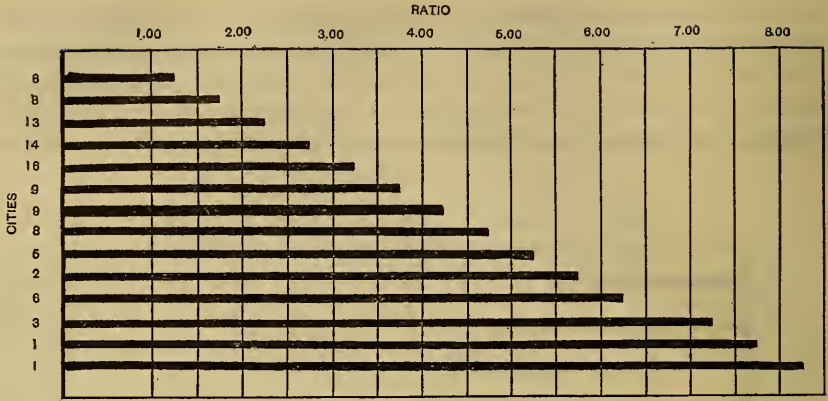


Fig. 7.—Frequencies of various ratios of school expenses to expenses for police in all cities. These ratios may be read as the number of dollars spent for schools for each dollar spent for police.

By the use of Figure 8 the place of any city in such diagrams as are given above can be readily found. As the lines represent the middle amounts in each step of the distribution in the table of frequencies, it is well to give the exact amount for the city in question.

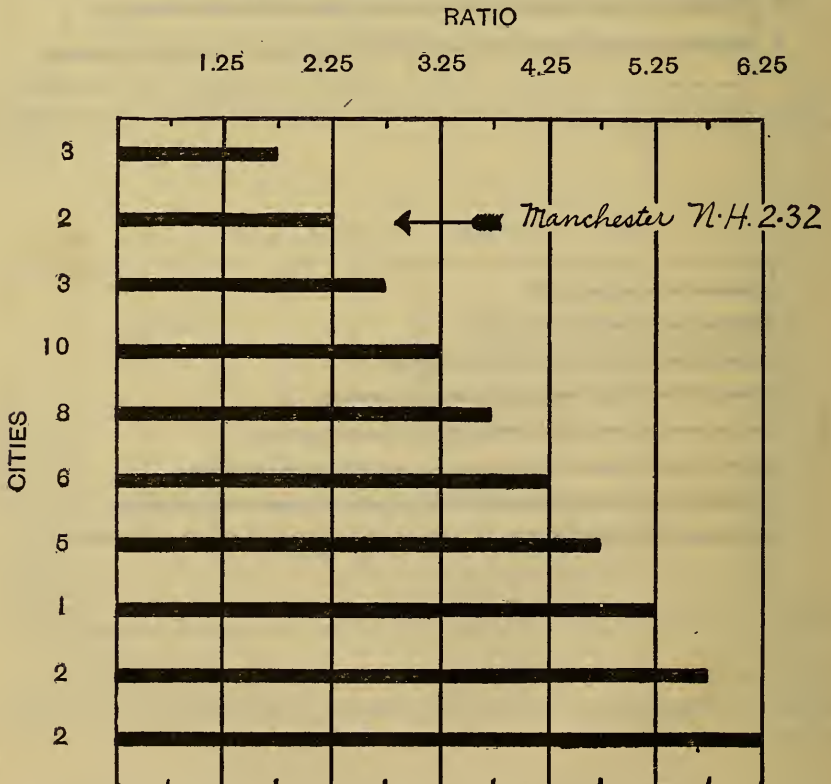


Fig. 8.—Ratio of total school expenses to population of cities in Group III and relation of ratio of Manchester, N. H., to those of all other ratios.

A comparison of the three ratios for each of the various cities reveals a tendency of cities to maintain the same relationship to other cities in all three respects.

The two tables given below (Tables 11 and 12) bring together certain facts relating to the cities at the lower and upper ends of the distribution of the three ratios in Table 31. The first table assembles the facts relating to the ranks and the second is based upon it, giving instead of the ranks the location of each city as regards the quartiles in the distribution.

TABLE 11.—Showing for those cities which are included in the lowest and highest quartiles of the distribution of ratios of school expenses to population (cost per capita) in each group, the rank of the same cities as regards ratio of school expenses to total city expenses, and ratio of school expenses to expenses for police. (See Table 31.)

Cities in lowest quartile.	Rank.			Cities in highest quartile.	Rank.		
	Ratio of school expenses to population.	Ratio of school expenses to total city expenses.	Ratio of school expenses to expenses for police.		Ratio of school expenses to population.	Ratio of school expenses to total city expenses.	Ratio of school expenses to expenses for police.
<i>Group I—13 cities.</i>				<i>Group I—13 cities.</i>			
New Orleans, La.	1	2	12	Washington, D. C.	13	8	6
Baltimore, Md.	2	5	3	Newark, N. J.	12	10	9
Milwaukee, Wis.	3	6	8	Minneapolis, Minn.	11	13	13
<i>Group II—20 cities.</i>				<i>Group II—20 cities.</i>			
Memphis, Tenn.	1	1	2	Spokane, Wash.	20	19	20
Nashville, Tenn.	2	5	7	Oakland, Cal.	19	10	14
Birmingham, Ala.	3	2	4	Grand Rapids, Mich.	18	18	18
St. Paul, Minn.	4	7	8	Cambridge, Mass.	17	9	11
Albany, N. Y.	5	3	4	Omaha, Nebr.	16	13	17
<i>Group III—42 cities.</i>				<i>Group III—42 cities.</i>			
Jacksonville, Fla.	1	3	2	Springfield, Mass.	40	20	30
Charleston, S. C.	2	1	3	Des Moines, Iowa.	39	38	39
Savannah, Ga.	3	5	1	Bayonne, N. J.	38	37	26
Norfolk, Va.	4	2	4	Hartford, Conn.	37	15	20
Manchester, N. H.	5	4	14	Tacoma, Wash.	36	22	34
Covington, Ky.	6	16	10	Saginaw, Mich.	35	35	37
Wilmington, Del.	7	14	6	Brocton, Mass.	34	19	25
Dallas, Tex.	8	11	18	Camden, N. J.	33	29	15
Reading, Pa.	9	24	31	Holyoke, Mass.	32	13	23
Elizabeth, N. J.	10	18	7	Portland, Me.	31	6	16
Wichita, Kans.	11	28	33				
<i>Group IV—28 cities.</i>				<i>Group IV—28 cities.</i>			
Chattanooga, Tenn.	1	2	1	Davenport, Iowa.	27	24	15
Knoxville, Tenn.	2	1	4	Malden, Mass.	27	17	17
Newport, Ky.	3	13	5	Sacramento, Cal.	26	19	10
Woonsocket, R. I.	4	4	6	Topeka, Kans.	25	27	28
Dubuque, Iowa.	5	8	10	Pueblo, Colo.	24	5	12
Little Rock, Ark.	6	16	3	Sioux City, Iowa.	23	24	20
Lancaster, Pa.	7	20	16	Haverhill, Mass.	22	7	15

TABLE 12.—Showing for those cities which lie in the lowest and highest quartiles in the distribution of ratio of school expenses to population (cost per capita) in each group, the number of cases in which their ratios of school expenses to city expenses and of school expenses to expenses of police fall in each of the four quartiles of those distributions. (See Table 31.)

I. CITIES WHOSE COSTS PER CAPITA LIE IN THE LOWEST OR FIRST QUARTILE OF RATIO OF SCHOOL EXPENSES TO POPULATION.

Cities of—	Number of cities.	Ratio of school expenses to total city expenses.				Ratio of school expenses to police expenses.			
		First quarter.	Second quarter.	Third quarter.	Fourth quarter.	First quarter.	Second quarter.	Third quarter.	Fourth quarter.
Group I.....	3	1	2	.....	.....	1	.....	2	.....
Group II.....	5	4	1	.....	.....	3	2	.....	.....
Group III.....	11	6	3	2	.....	7	2	2	.....
Group IV.....	7	3	2	2	.....	5	1	1	.....
Total.....	26	14	8	4	.....	16	5	5	.....

II. CITIES WHOSE COSTS PER CAPITA LIE IN THE HIGHEST OR FOURTH QUARTILE OF RATIO OF SCHOOL EXPENSES TO POPULATION.

Group I.....	3	.....	1	1	1	.....	1	1	1
Group II.....	5	.....	.....	2	3	.....	.....	2	3
Group III.....	10	1	4	2	3	.....	3	4	3
Group IV.....	7	2	.....	2	3	.....	2	4	1
Total.....	25	3	5	7	10	.....	6	11	8

These tables indicate that cities which give low amounts per capita to schools do not generally reduce correspondingly the costs of their municipal governments in general and of their police departments so that the ratio of school expenses to these expenses will be maintained near the median, and that cities which pay large amounts per capita for schools do not as a rule maintain their city governments at such a high rate of expense as to bring the ratio of school expenses to total city expenses and of school expenses to police down near the median. In other words, expenses for schools and other city expenses are largely dissociated. Those considerations which prompt a cutting down in school expenses do not produce reductions in city expenses, and increases in school expenses do not cause augmentation in amounts spent for other purposes.

This may be due in part to the separation in many cities of the organs of local government for education and for other civil purposes. While the problem can not be entered upon in this study there seems to be a tendency in favor of cities with departments of education making low appropriations for school purposes without paring down other expenses; while those cities in which the schools are under the control of independent districts spend relatively large amounts for educational purposes. The wisdom or unwisdom of either form of administration can not be discussed here. It may be said in passing, however, that one of the most important considerations in

this particular matter is the efficiency of the schools in the various cities under the two forms of organization.

Comparison of percentages by groups.—The following conclusions are apparent from an inspection of the median and the limits of the middle 50 per cent of each group:

1. The larger the city the greater is the expense per capita of population for maintaining schools.
2. The larger the city the smaller is the ratio of school expenses to total city expenses.
3. The larger the city the smaller is the ratio of school expenses to expenses for the police department.

From the above it may be drawn that, while expenses for schools per capita of population increase with the size of the cities, they do not as a rule increase so much as other city expenses.

TABLE 13.—*Showing for each ratio the 5 cities in the entire list of 103 cities that stand lowest and the 5 that stand highest, together with the amounts of the ratios. (See Table 31.)*

RATIO OF SCHOOL EXPENSES TO POPULATION.

Lowest ratios.		Highest ratios.	
Cities.	Ratios.	Cities.	Ratios.
Jacksonville, Fla.....	1.74	Washington, D. C.....	6.40
Charleston, S. C.....	1.78	Springfield, Mass.....	6.09
Savannah, Ga.....	1.94	Newark, N. J.....	6.02
Chattanooga, Tenn.....	2.04	Des Moines, Iowa.....	6.01
Norfolk, Va.....	2.21	Spokane, Wash.....	5.84

RATIO OF SCHOOL EXPENSES TO TOTAL CITY EXPENSES.

Savannah, Ga.....	0.150	Joplin, Mo.....	0.530
Charleston, S. C.....	.177	Topeka, Kans.....	.530
Norfolk, Va.....	.192	York, Pa.....	.509
Jacksonville, Fla.....	.199	Scranton, Pa.....	.498
San Francisco, Cal.....	.201	New Castle, Pa.....	.492

RATIO OF SCHOOL EXPENSES TO EXPENSES FOR POLICE.

Savannah, Ga.....	1.04	Topeka, Kans.....	8.04
Jacksonville, Fla.....	1.06	Racine, Wis.....	7.92
Charleston, S. C.....	1.08	Passaic, N. J.....	7.45
Norfolk, Va.....	1.19	Oklahoma City, Okla.....	7.23
San Francisco, Cal.....	1.22	Spokane, Wash.....	7.07

AVERAGE COST PER PUPIL OF ELEMENTARY AND SECONDARY SCHOOLS.

Table 32 makes possible a comparison of the average cost per pupil of elementary and secondary schools in each city. It also contains the enrollment figures that have been used in all the computations of average cost made in this study and the date of the close of the fiscal year in each city.

The following table of frequencies shows the distribution of the ratios of average cost of elementary and secondary schools:

TABLE 14.—*Distribution of ratios of average cost of elementary and secondary schools.*

Ratio.	Number of cities.				
	Group I.	Group II.	Group III.	Group IV.	All.
1.00 to 1.49.....		1	1	1	3
1.50 to 1.99.....	2	8	7	8	25
2.00 to 2.49.....	5	4	10	3	22
2.50 to 2.99.....	1		5	4	10
3.00 to 3.49.....		2	3		5
3.50 to 3.99.....	2			1	3
4.00 to 4.49.....			1		1
4.50 to 4.99.....					

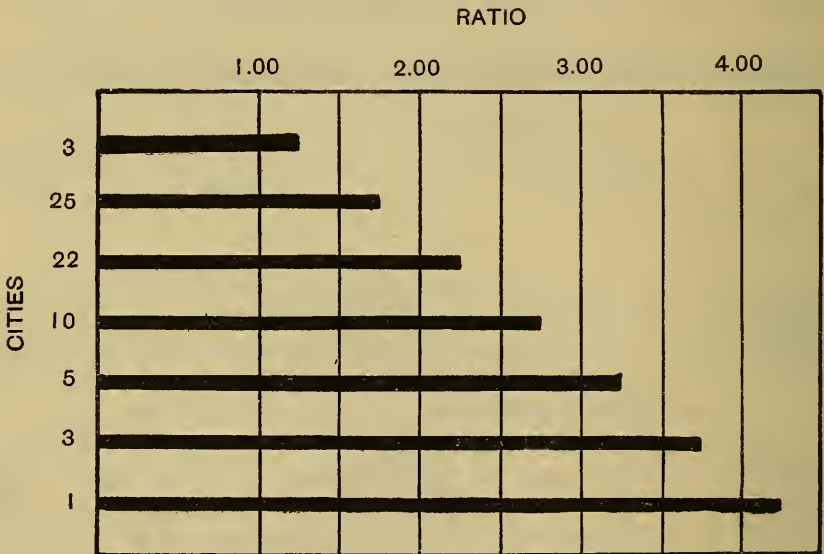


FIG. 9.—Ratios of average costs per pupil of secondary and elementary schools in all cities. This ratio may also be read as the number of dollars expended for secondary schools for each dollar expended for elementary schools.

The following table gives the names of cities in each group that are located at the principal points in the distribution of ratios of average costs of secondary and elementary schools in each group:

TABLE 15.—Showing names of cities at various points in the distribution of ratios of costs of elementary and secondary schools, together with amount of ratio in each case.

	Lowest.	Ratio.	Lower limit of middle 50 per cent.	Ratio.	Median.	Ratio.	Upper limit of middle 50 per cent.	Ratio.	Highest.	Ratio.
All cities.....										
Group I.....	Wilkes-Barre, Pa.....	1.33	{Tacoma, Wash.....	1.80	Bay City, Mich.....	2.16	{New Britain, Conn.....	2.60	Passaic, N. J.....	4.04
	Minneapolis, Minn.....	1.75	{Omaha, Nebr.....		{Washington, D. C.....	2.27	{Knoxville, Tenn.....		Baltimore, Md.....	3.90
Group II.....	Memphis, Tenn.....	1.39	{San Francisco, Cal.....	1.97	{Los Angeles, Cal.....	1.84	{Newark, N. J.....	2.65		
	Wilkes-Barre, Pa.....	1.33	{Buffalo, N. Y.....	1.71	Lovell, Mass.....	2.27	{St. Paul, Minn.....	2.34	Scranton, Pa.....	3.15
Group III.....			{Nashville, Tenn.....	1.89	Elizabeth, N. J.....	1.90	{Birmingham, Ala.....	2.78	Passaic, N. J.....	4.04
Group IV.....	Topeka, Kans.....	1.41	{Grand Rapids, Mich.....	1.72	York, Pa.....		{Harrisburg, Pa.....	2.47	Pueblo, Colo.....	3.50
			{Des Moines, Iowa.....				{Johnstown, Pa.....			
			{New Castle, Pa.....				{Malden, Mass.....			
							{Racine, Wis.....			

From the above table it may be seen (1) that there is a wide variation in the relative average cost of elementary and high schools; (2) that no territorial lines or division of cities by population can be drawn in making a differentiation between them, each section of the country and one State, Pennsylvania, being represented in almost every column. The extreme variation in all the cities included is 2.71. The extreme variations shown in the table indicate that proper balances are not being maintained in the school expenditures of some cities. More money in some cases should be spent upon the elementary schools; in others less money should be spent upon the high schools. The retardation and elimination statistics of such cities as have extreme ratios should be carefully studied in this connection. For instance, Baltimore, which has just been shown spends too little on its elementary schools rather than too much on its high schools, has a high percentage of retardation and elimination. More money is needed in that city for elementary schools, both to maintain its present curriculum and to widen the scope of those schools, although the expenses of the high schools should not be diminished. (See p. 94.) In some cities it would be a far better distribution of public funds to take away from high schools having high average cost and high percentage of funds devoted to them and to add the same to the broadening of courses in the elementary schools in order to meet the needs of those who are backward or who are losing interest in the present curriculum. This is true especially if the city has high percentages of retardation and elimination.

The question arises, What is the range of a proper ratio between average costs of elementary and high schools? The table above furnishes a tentative answer to the question for each group of cities and for all cities taken together. Taken all in all the best answer for all cities is, The ratio should lie between 1.80 and 2.60—a range of .80—with 2.16 as the best representative amount. The two former figures are limits of the middle 50 per cent for the entire list of cities and any variation below and above these amounts should have reasonable justification.

TABLE 16.—Showing total school expenses and expenses of general control of school systems in 103 cities of 30,000 population and over, 1909.

Cities.	Total school expenses.	Board of education.	Finance offices.	Superintendent's office.	Other overhead expenses.	Total for general control.
Grand total.....	\$56,424,146	\$566,896	\$336,802	\$760,775	\$296,917	\$1,961,390
Group I.....	30,447,159	405,734	235,291	296,533	184,177	1,121,735
Group II.....	11,133,770	53,811	30,554	162,706	51,805	298,876
Group III.....	10,687,807	88,256	44,647	199,683	46,401	378,987
Group IV.....	4,155,410	19,095	26,310	101,853	14,534	161,792

GROUP I.—CITIES HAVING A POPULATION OF 300,000 OR OVER IN 1910.

1	Chicago, Ill.....	\$9,492,789	\$90,925	\$201,380	\$36,929	\$31,946	\$361,180
2	St. Louis, Mo.....	2,798,654	193,866	7,609	7,000	23,075	231,550
3	Cleveland, Ohio.....	2,374,107	7,032	8,379	63,952	111,347	190,710
4	Baltimore, Md.....	1,824,823	20,474	.....	15,248	3,714	39,436
5	Detroit, Mich.....	1,706,858	.....	.....	29,922	.....	29,922
6	Buffalo, N. Y.....	1,607,378	4,929	.....	13,141	.....	118,070
7	San Francisco, Cal.....	1,717,249	11,959	.....	30,325	.....	42,284
8	Milwaukee, Wis.....	1,314,257	19,280	.....	23,541	5,639	48,460
9	Newark, N. J.....	1,944,549	36,019	.....	21,349	.....	57,368
10	New Orleans, La.....	952,247	.....	3,827	20,558	70	24,455
11	Washington, D. C.....	2,055,915	13,369	.....	13,750	4,466	31,585
12	Los Angeles, Cal.....	1,288,852	4,758	14,096	11,600	3,920	34,374
13	Minneapolis, Minn.....	1,369,481	3,123	.....	9,218	.....	12,341

GROUP II.—CITIES HAVING A POPULATION OF 100,000 TO 300,000 IN 1910.

14	Jersey City, N. J.....	\$960,225	\$3,209	.....	\$9,179	\$5,264	\$17,652
15	Providence, R. I.....	954,168	.....	.....	25,323	5,779	31,102
16	St. Paul, Minn.....	755,981	5,962	.....	7,100	.....	13,062
17	Portland, Oreg.....	671,062	.....	\$4,417	9,000	.....	13,417
18	Columbus, Ohio.....	693,826	.....	6,170	5,440	13,184	24,794
19	Toledo, Ohio.....	645,916	3,800	.....	3,500	12,505	20,605
20	Oakland, Cal.....	586,014	.....	800	10,968	83	11,051
21	Syracuse, N. Y.....	584,536	4,578	.....	4,500	1,500	10,878
22	New Haven, Conn.....	556,589	7,823	713	4,817	891	14,244
23	Birmingham, Ala.....	160,318	.....	.....	6,427	.....	6,427
24	Memphis, Tenn.....	288,401	264	3,231	5,400	1,376	10,271
25	Scranton, Pa.....	552,007	.....	13,538	16,506	1,680	31,724
26	Paterson, N. J.....	524,307	4,815	.....	3,700	.....	8,515
27	Omaha, Nebr.....	544,819	12,948	1,600	6,681	584	21,813
28	Grand Rapids, Mich.....	538,899	2,095	85	12,782	2,792	17,754
29	Nashville, Tenn.....	274,065	1,995	.....	3,000	1,417	6,412
30	Lowell, Mass.....	429,964	.....	.....	5,761	1,200	6,961
31	Cambridge, Mass.....	507,322	.....	.....	11,568	.....	11,568
32	Spokane, Wash.....	541,795	6,322	.....	3,500	3,550	13,372
33	Albany, N. Y.....	363,556	.....	.....	7,254	.....	7,254

TABLE 16.—Showing total school expenses and expenses of general control of school systems in 103 cities of 30,000 population and over, 1909—Continued.

GROUP III.—CITIES HAVING A POPULATION OF 50,000 TO 100,000 IN 1910.

	Cities.	Total school expenses.	Board of education.	Finance offices.	Superintendent's office.	Other overhead expenses.	Total for general control.
34	Hartford, Conn.....	\$535,300	\$5,000	\$1,867	\$3,203	\$1,182	\$11,252
35	Trenton, N. J.....	408,423	2,680	.....	5,500	.....	8,180
36	New Bedford, Mass.....	331,048	.....	.....	10,525	.....	10,525
37	Reading, Pa.....	232,263	.....	1,800	7,920	.....	9,720
38	Camden, N. J.....	419,283	.....	.....	8,392	.....	8,392
39	Dallas, Tex.....	234,641	3,740	.....	3,672	253	7,665
40	Springfield, Mass.....	505,700	.....	.....	11,790	2,946	14,736
41	Wilmington, Del.....	235,293	.....	.....	8,264	140	8,404
42	Des Moines, Iowa.....	495,745	4,333	875	5,217	3,252	13,677
43	Lawrence, Mass.....	293,398	.....	.....	4,842	806	5,648
44	Tacoma, Wash.....	363,142	4,466	.....	7,927	4,175	16,568
45	Kansas City, Kans.....	253,355	9,349	50	4,273	2,286	15,953
46	St. Joseph, Mo.....	269,754	6,327	600	3,932	1,432	12,291
47	Troy, N. Y.....	330,346	2,900	194	4,950	439	8,483
48	Utica, N. Y.....	268,696	.....	.....	4,800	5,192	9,992
49	Elizabeth, N. J.....	212,509	2,663	.....	3,600	.....	6,263
50	Schenectady, N. Y.....	242,238	1,422	.....	3,700	657	5,779
51	Hoboken, N. J.....	360,404	10,956	.....	4,650	300	15,906
52	Manchester, N. H.....	157,726	360	.....	3,582	.....	3,942
53	Evansville, Ind.....	232,761	1,602	800	4,096	124	6,622
54	Norfolk, Va.....	144,720	1,229	228	1,615	1,328	4,400
55	Wilkes-Barre, Pa.....	221,600	.....	6,503	6,178	266	12,947
56	Peoria, Ill.....	270,458	3,820	600	3,000	8,011	15,431
57	Erie, Pa.....	217,215	6,021	9,178	4,185	127	19,511
58	Savannah, Ga.....	124,860	.....	.....	4,500	1,127	5,627
59	Oklahoma, Okla.....	189,447	.....	2,195	3,320	.....	5,515
60	Harrisburg, Pa.....	253,430	4,040	2,020	2,800	2,520	11,380
61	Charleston, S. C.....	103,359	.....	.....	2,720	.....	2,720
62	Portland, Me.....	257,563	.....	.....	3,515	1,192	4,707
63	East St. Louis, Ill.....	187,189	3,500	2,683	.....	1,491	7,674
64	Holyoke, Mass.....	248,410	.....	.....	5,628	1,319	6,947
65	Jacksonville, Fla.....	85,088	330	2,070	3,404	.....	5,804
66	Brockton, Mass.....	253,474	.....	.....	6,054	.....	6,054
67	Bayonne, N. J.....	287,089	4,018	.....	3,000	277	7,295
68	Johnstown, Pa.....	183,061	.....	2,606	5,319	.....	7,925
69	Passaic, N. J.....	209,331	3,164	.....	3,540	.....	6,704
70	Wichita, Kans.....	138,570	1,371	300	2,450	1,280	5,401
71	Covington, Ky.....	134,819	2,111	.....	2,400	2,195	6,706
72	Allentown, Pa.....	162,076	.....	6,535	4,964	350	11,849
73	Springfield, Ill.....	185,208	.....	.....	6,029	120	6,149
74	Saginaw, Mich.....	241,044	468	2,823	6,746	1,614	11,651
75	Canton, Ohio.....	157,771	2,386	720	3,481	.....	6,587

TABLE 16.—Showing total school expenses and expenses of general control of school systems in 103 cities of 30,000 population and over, 1909—Continued.

GROUP IV.—CITIES HAVING A POPULATION OF 30,000 TO 50,000 IN 1910.

	Cities.	Total school expenses.	Board of education.	Finance offices.	Superintendent's office.	Other overhead expenses.	Total for general control.
76	Sioux City, Iowa.....	\$201,948	.....	.....	\$6,544	.....	\$6,544
77	Lancaster, Pa.....	137,387	.....	\$1,533	3,458	\$203	5,194
78	Atlantic City, N. J.....	184,872	.....	1,200	3,355	.....	4,555
79	Little Rock, Ark.....	128,597	.....	6,770	4,087	950	11,807
80	Rockford, Ill.....	163,741	\$1,060	.....	2,770	.....	3,830
81	Bay City, Mich.....	168,253	500	250	3,550	2,001	6,301
82	York, Pa.....	146,104	.....	2,435	5,304	1,200	8,939
83	Sacramento, Cal.....	220,683	.....	.....	4,262	.....	4,262
84	Chattanooga, Tenn.....	86,702	1,340	.....	2,556	75	3,971
85	Malden, Mass.....	226,888	.....	.....	5,475	.....	5,475
86	Pueblo, Colo.....	187,326	2,133	1,850	5,756	.....	9,739
87	Haverhill, Mass.....	184,473	.....	.....	3,087	2,347	5,434
88	New Britain, Conn.....	143,210	50	.....	4,531	888	5,469
89	Topeka, Kans.....	201,880	1,408	350	3,400	.....	5,158
90	Davenport, Iowa.....	226,280	1,800	100	2,750	2,187	6,837
91	Wheeling, W. Va.....	153,298	1,778	2,948	3,329	.....	8,055
92	Chester, Pa.....	122,064	50	3,688	2,734	850	7,322
93	Dubuque, Iowa.....	116,346	1,480	420	2,700	36	4,636
94	Woonsocket, R. I.....	97,801	.....	.....	2,932	501	3,433
95	Racine, Wis.....	140,916	900	.....	2,700	661	4,261
96	Knoxville, Tenn.....	79,215	.....	.....	3,490	.....	3,490
97	New Castle, Pa.....	146,085	100	3,081	3,201	56	6,438
98	Joliet, Ill.....	117,329	2,617	.....	4,512	772	7,901
99	Auburn, N. Y.....	123,028	1,868	.....	4,321	440	6,629
100	Taunton, Mass.....	142,618	.....	.....	2,873	50	2,923
101	Oskosh, Wis.....	107,605	16	.....	2,956	244	3,216
102	Joplin, Mo.....	120,347	300	1,685	3,060	900	5,945
103	Newport, Ky.....	80,409	1,695	.....	2,160	173	4,028

TABLE 17.—Showing expenses of instruction, operation, and maintenance of elementary schools, including kindergartens, in 103 cities of 30,000 population and over, 1909.

Cities.	Salaries of teachers.	Salaries and expenses of supervisors.	Text-books, stationery, and general school supplies.	Janitors, engineers, and firemen.	Fuel.	Water.	Light and power.	Janitors' supplies and sundry expenses.	Apparatus and mammal-training equipment.	School libraries.	Repairs to places of equipment.	Repairs to buildings.	Total.
Grand total.....	\$31,362,595	\$987,692	\$1,414,330	\$3,246,078	\$1,496,456	\$99,018	\$147,205	\$674,531	\$233,834	\$46,321	\$442,018	\$2,810,129	\$42,900,207
Group I.....	17,184,477	410,444	677,786	1,749,075	688,568	47,868	83,290	369,102	113,998	24,791	227,512	1,622,601	23,199,402
Group II.....	6,245,830	204,786	277,141	645,172	338,103	23,883	20,808	110,320	32,397	6,357	58,745	526,950	8,530,582
Group III.....	5,742,997	260,777	354,545	608,734	332,955	18,314	32,291	123,539	33,545	11,758	102,525	471,758	8,093,738
Group IV.....	2,180,291	111,685	104,908	243,097	136,740	8,953	10,816	71,570	13,954	3,415	53,236	188,820	3,136,485

GROUP I.—CITIES HAVING A POPULATION OF 300,000 OR OVER IN 1910.

1	Chicago, Ill.....	\$5,501,792	\$22,500	\$136,115	\$664,415	\$255,643	\$15,061	\$39,611	\$23,666	\$15,573	\$7,647	\$678,651	\$7,360,704
2	St. Louis, Mo.....	1,503,994	39,658	77,796	114,096	32,599	13,962	27,710	3,517	1,483	7,085	78,953	1,906,210
3	Cleveland, Ohio.....	1,108,445	108,450	16,794	145,191	58,876	11,875	88,211	3,261	.....	4,476	101,860	1,647,489
4	Baltimore, Md.....	1,065,375	2,995	65,062	100,921	55,521	8,404	200	2,654	.....	10,301	117,667	1,429,100
5	Detroit, Mich.....	996,945	13,500	44,182	110,730	38,661	308	18,765	36,997	.....	.....	39,192	1,299,280
6	Buffalo, N. Y.....	825,588	114,625	50,995	78,724	42,983	9,886	38,321	11,045	4,231	32,415	77,082	1,299,344
7	San Francisco, Cal.....	1,049,003	134,547	134,153	8,677	12,420	1,493	38,029	3,210	.....	18,072	59,412	1,332,016
8	Milwaukee, Wis.....	770,349	10,455	13,735	57,902	39,473	5,051	3,096	8,806	2,186	.....	89,159	1,011,679
9	Newark, N. J.....	1,126,725	24,992	59,356	88,968	34,126	5,398	10,115	7,183	.....	63,081	91,574	1,516,593
10	New Orleans, La.....	549,392	8,400	43,407	37,583	7,221	100	58,859	.....	.....	25,987	73,663	801,612
11	Washington, D. C.....	1,040,259	52,225	74,116	87,845	66,386	5,651	16,891	11,049	.....	6,056	173,859	1,534,037
12	Los Angeles, Cal.....	820,494	12,614	12,082	50,989	12,082	150	14,230	2,510	1,318	7,612	41,529	1,069,739
13	Minneapolis, Minn.....	826,116	.....	75,847	75,588	36,320	6,041	20,364	.....	.....	44,830	.....	1,091,649

GROUP II.—CITIES HAVING A POPULATION OF 100,000 TO 300,000 IN 1910.

14	Jersey City, N. J.....	\$637,202	\$9,686	\$29,203	\$45,998	\$99,087	\$1,823	\$5,094	\$15,507	\$170	\$5,514	\$44,180	\$823,464
15	Providence, R. I.....	476,177	9,949	22,860	40,417	49,955	1,214	2,795	.....	.....	5,869	70,699	684,710
16	St. Paul, Minn.....	442,973	8,225	2,000	82,048	27,281	3,755	14,134	.....	.....	.....	21,686	596,292
17	Portland, Oreg.....	418,562	.....	11,888	28,842	7,236	2,285	.....	10,439	84	.....	41,607	467,444
18	Columbus, Ohio.....	298,571	66,771	16,589	43,698	17,604	.....	3,706	11,996	.....	9,122	14,877	523,944

GROUP III.—CITIES HAVING A POPULATION OF 50,000 TO 100,000 IN 1910.

19	Toledo, Ohio.....	400,598	2,450	20,510	24,649	23,358	1,723	632	22,052	7,215	3,051	6,656	9,693
20	Oakland, Cal.....	368,371	11,412	11,412	25,389	25,389	1,032	3,716	3,716	5,222	3,051	9,346	28,981
21	Syracuse, N. Y.....	310,611	14,900	14,900	28,241	28,241	2,865	8,069	8,069	3,554	1,967	974	20,151
22	New Haven, Conn.....	304,456	31,750	15,318	30,724	22,042	1,757	8,835	8,835	588	1,967	130	6,389
23	Birmingham, Ala.....	84,289	12,433	754	6,785	3,148	74	1,336	1,336	.....	.....	.....	4,801
24	Memphis, Tenn.....	185,073	8,110	9,408	20,159	5,505	1,443	500	2,434	.....	.....	6,925	6,841
25	Scranton, Pa.....	287,794	30,017	28,092	28,092	49,621	5,073	5,998	5,998	.....	.....	.....	12,408
26	Fairmont, N. J.....	322,018	1,000	1,782	33,650	8,372	1,095	80	2,040	.....	.....	3,731	56,848
27	Ormaiztegui, Nebr.....	306,487	.....	13,826	34,303	13,826	713	4,204	4,204	5,236	.....	2,447	32,211
28	Grand Rapids, Mich.....	270,174	37,088	11,700	26,979	10,496	1,152	2,755	1,943	4,061	.....	2,400	41,381
29	Nashville, Tenn.....	171,561	5,300	4,473	13,013	3,537	660	2,754	2,754	.....	200	1,601	27,840
30	Lowell, Mass.....	215,082	1,921	35,098	16,866	16,866	1,225	1,928	2,075	.....	.....	.....	37,002
31	Cambridge, Mass.....	251,470	1,192	6,298	31,561	11,230	999	2,278	2,278	7,255	.....	2,809	20,910
32	Spokane, Wash.....	284,727	4,932	25,037	28,676	16,460	729	14,975	14,975	830	455	.....	13,913
33	Albany, N. Y.....	209,524	4,700	13,980	18,000	16,837	.....	1,012	1,800	94	440	2,221	14,532
34	Hartford, Conn.....	\$254,187	\$30,000	\$21,272	\$27,382	\$16,958	\$2,308	\$3,349	\$15,382	.....	.....	\$2,925	\$21,673
35	Trenton, N. J.....	241,124	5,050	14,014	18,836	11,715	.....	750	8,560	.....	180	1,707	8,343
36	New Bedford, Mass.....	171,521	7,061	13,928	20,824	13,935	.....	518	3,701	\$1,427	.....	1,046	17,996
37	Reading, Pa.....	159,871	1,595	10,544	23,709	10,453	.....	100	2,497	822	.....	3,000	7,099
38	Camden, N. J.....	259,107	5,000	21,493	29,573	12,291	369	421	2,336	2,867	.....	8,043	15,139
39	Dallas, Tex.....	121,371	27,188	2,244	9,918	4,080	.....	569	6,947	.....	.....	4,522	169,892
40	Springfield, Mass.....	230,794	18,980	17,303	27,148	24,241	.....	3,534	6,947	4,433	.....	2,590	349,773
41	Wilmington, Del.....	141,433	.....	7,676	11,200	9,046	.....	.....	1,361	1,058	.....	.....	13,572
42	Des Moines, Iowa.....	258,789	6,867	28,821	29,781	13,962	2,029	852	2,390	2,798	.....	.....	23,460
43	Lawrence, Mass.....	158,282	8,055	8,418	17,465	13,497	.....	1,778	4,816	.....	.....	244	13,023
44	Tacoma, Wash.....	182,473	23,084	11,410	17,625	7,825	1,439	629	4,276	931	.....	3,440	4,697
45	Kansas City, Kans.....	136,342	.....	3,946	12,870	7,318	1,157	173	1,551	728	.....	528	9,290
46	St. Joseph, Mo.....	154,814	4,104	3,367	26,085	9,097	22	952	1,33	1,188	593	.....	7,966
47	Troy, N. Y.....	154,241	6,831	7,037	17,845	15,194	.....	1,037	3,070	63	2,645	5,222	32,161
48	Utica, N. Y.....	156,621	4,810	17,362	14,080	14,080	.....	2,142	5,134	123	117	6,290	6,725
49	Elizabeth, N. J.....	114,503	2,700	12,530	11,450	5,289	579	1,787	1,108	.....	90	6,324	3,721
50	Schenectady, N. Y.....	141,966	7,130	4,927	9,090	9,580	.....	1,878	1,086	684	1,026	13,941	191,313
51	Hoboken, N. J.....	217,270	.....	12,795	14,669	5,802	1,244	1,058	3,582	.....	.....	1,330	29,686
52	Manchester, N. H.....	92,949	.....	4,124	6,280	10,368	1,105	683	1,299	599	.....	1,256	6,807
53	Evansville, Ind.....	118,516	20,006	3,524	14,980	5,147	.....	140	3,987	.....	.....	446	11,926
54	Norfolk, Va.....	97,210	.....	2,186	2,890	2,890	.....	502	1,088	647	.....	1,006	5,462
55	Wilkes-Barre, Pa.....	122,697	2,188	14,201	12,636	7,651	515	532	1,539	.....	.....	15,006	176,965

¹ Included in expenses for repairs and replacements of equipment.

TABLE 17.—Showing expenses of instruction, operation, and maintenance of elementary schools, including kindergartens, in 103 cities of 30,000 population and over, 1909—Continued.

GROUP III.—CITIES HAVING A POPULATION OF 50,000 TO 100,000 IN 1910—Continued.

Cities.	Salaries of teachers.	Salaries and expenses of supervisors.	Text-books, stationery, and general school supplies.	Janitors, engineers, and firemen.	Fuel.	Water.	Light and power.	Jaditors' supplies and sundry expenses.	Apparatus and maintenance of training equipment.	School libraries.	Repairs to place-ments of equip-ment.	Repairs to buildings.	Total.
56 Peoria, Ill.	\$171,701	\$6,607	\$3,395	\$15,085	\$5,584	.....	\$702	\$3379	\$3,949	.....	.....	\$11,448	\$218,850
57 Erie, Pa.	97,834	15,685	8,084	13,695	7,569	.....	1,489	916	185	.....	\$885	4,517	150,859
58 Savannah, Ga.	90,294	.....	.....	4,087	1,888	.....	.....	538	.....	.....	.....	1,887	98,394
59 Oklahoma, Okla.	101,653	5,000	6,288	8,558	3,175	.....	.....	.....	.....	.....	5,820	9,209	140,063
60 Harrisburg, Pa.	121,918	2,800	16,835	17,520	7,295	\$269	896	754	.....	.....	5,673	9,904	183,864
61 Charleston, S. C.	46,800	.....	262	1,300	.....	.....	.....	8,625	.....	.....	.....	3,157	60,234
62 Portland, Me.	135,902	4,300	8,912	18,690	10,532	199	1,043	2,347	1,294	\$536	1,112	14,161	199,028
63 East St. Louis, Ill.	88,034	21,283	4,332	19,417	3,321	1,654	308	1,448	1,199	965	1,267	6,762	150,060
64 Holyoke, Mass.	124,556	3,494	8,334	10,914	8,376	1,375	1,289	2,465	.....	.....	1,830	19,520	182,172
65 Jacksonville, Fla.	44,311	.....	.....	2,398	632	.....	.....	1,667	136	.....	1,736	4,301	55,181
66 Brockton, Mass.	125,623	3,000	11,548	12,917	13,866	474	682	3,421	.....	.....	.....	9,350	180,881
67 Bayonne, N. J.	175,756	2,340	14,746	14,133	6,000	.....	.....	7,787	758	.....	3,497	20,000	246,017
68 Johnstown, Pa.	90,492	2,400	6,134	12,342	4,000	1,625	100	.....	.....	.....	.....	23,957	141,030
69 Painesville, N. J.	119,497	.....	8,401	10,410	6,570	.....	1,260	2,942	.....	58	600	11,121	161,284
70 Wichita, Kans.	72,875	1,720	2,835	7,057	2,927	.....	.....	4,451	.....	.....	1,781	14,368	108,014
71 Covington, Ky.	78,533	5,030	166	7,320	1,749	310	475	1,538	.....	.....	331	11,691	107,143
72 Allentown, Pa.	82,977	1,545	6,495	9,951	4,797	.....	325	2,889	.....	.....	809	16,209	125,997
73 Springfield, Ill.	99,584	6,484	4,899	8,973	3,252	.....	79	2,921	4,514	.....	1,694	12,231	140,221
74 Saginaw, Mich.	103,122	4,300	6,573	13,426	6,990	1,156	804	1,629	3,142	3,804	1,141	10,352	156,439
75 Canton, Ohio.	85,273	2,240	10,086	11,700	4,313	.....	14	391	.....	.....	273	4,454	118,774

GROUP IV.—CITIES HAVING A POPULATION OF 30,000 TO 50,000 IN 1910.

76 Sioux City, Iowa.	\$117,332	\$1,700	\$1,167	\$14,214	\$9,790	\$827	\$127	\$3,294	.....	.....	.....	\$12,326	\$160,777
77 Lancaster, Pa.	66,232	.....	4,809	9,800	4,042	.....	132	3,657	.....	.....	.....	.....	100,269
78 Atlantic City, N. J.	87,725	.....	10,799	7,991	9,236	1 3,000	.....	16,538	.....	.....	.....	11,090	146,379
79 Little Rock, Ark.	72,653	3,300	2,547	5,237	3,304	992	495	999	.....	.....	2,150	2,978	94,655
80 Rockford, Ill.	80,096	4,896	634	10,969	6,995	.....	336	3,876	\$1,804	.....	.....	10,220	119,826

81	Bay City, Mich.....	81,039	4,722	10,243	4,335	644	236	1,332	.....	361	8,477	122,539
82	York Pa.....	77,966	8,067	9,946	5,293	760	372	.....	.....	858	7,371	112,439
83	Sacramento, Cal.....	131,541	3,862	11,676	1,595	.....	649	1,946	1,296	1,701	6,252	164,129
84	Chattanooga, Tenn.....	56,435	1,193	3,384	1,732	277	65	1,317	.....	.....	5,348	69,751
85	Malden, Mass.....	115,367	7,630	11,952	11,551	.....	406	537	.....	678	9,245	159,700
86	Pueblo, Colo.....	100,884	4,649	12,164	3,967	435	618	1,149	.....	2,303	4,660	138,833
87	Haverhill, Mass.....	99,727	6,692	11,030	7,741	.....	293	587	523	946	9,471	138,827
88	New Britain, Conn.....	65,793	10,083	7,417	6,949	.....	1,830	391	.....	471	2,453	97,386
89	Topeka, Kans.....	114,363	3,110	12,570	5,396	116	815	850	1,773	772	8,512	130,230
90	Davenport, Iowa.....	90,232	1,013	3,554	4,080	.....	48	875	1,633	180	7,789	161,799
91	Wheeling, W. Va.....	84,286	1,222	6,180	4,124	.....	989	2,116	1,040	1,403	11,885	127,974
92	Chester, Pa.....	67,482	5,111	9,542	.....	.....	.....	17,849	.....	.....	.....	99,984
93	Dubuque, Iowa.....	62,222	640	7,285	4,645	56	70	232	1,269	62	7,534	89,376
94	Woonsocket, R. I.....	51,128	4,404	6,322	6,809	494	133	919	95	164	951	79,251
95	Racine, Wis.....	81,352	1,313	8,276	3,640	.....	716	933	2,215	221	661	105,778
96	Knoxville, Tenn.....	46,972	701	4,547	968	210	31	609	.....	2,805	3,011	60,519
97	New Castle, Pa.....	79,363	7,295	10,230	2,825	20	795	2,934	.....	65	9,316	116,173
98	Joliet, Ill.....	55,479	2,750	9,258	4,318	.....	322	1,224	.....	661	5,043	81,501
99	Auburn, N. Y.....	67,460	2,151	7,147	5,650	308	223	573	1,265	103	1,616	89,296
100	Taunton, Mass.....	78,449	3,756	8,561	9,796	289	95	3,992	121	.....	5,743	113,142
101	Oshkosh, Wis.....	52,642	1,278	6,790	4,020	.....	816	599	920	866	1,972	78,200
102	Joplin, Mo.....	61,005	2,421	5,400	2,090	.....	.....	1,343	.....	.....	23,297	96,816
103	Newport, Ky.....	44,066	1,009	5,400	1,249	.....	204	899	.....	.....	5,683	60,960

² Included in expenses for repairs and replacements of equipment.

¹ Estimate.

TABLE 18.—Showing expenses of instruction, operation, and maintenance of secondary schools in 103 cities of 30,000 population and over, 1909.

Cities.	Salaries of teachers.	Salaries and expenses of super- visors.	Text- books, station- ery and general school supplies.	Janitors, engi- neers, and firemen.	Fuel.	Water.	Light and power.	Janitors' supplies and sundry expenses.	Appara- tus and manual training equip- ment.	School libraries.	Repairs and replace- ments of equip- ment.	Repairs to buildings.	Total.
Grand total.....	\$6,309,322	\$186,113	\$371,893	\$546,100	\$236,076	\$13,764	\$58,277	\$130,823	\$132,949	\$41,005	\$60,113	\$338,029	\$8,425,064
Group I.....	3,137,125	82,909	172,429	260,451	94,287	4,223	25,027	56,757	58,563	10,754	30,429	182,584	4,115,538
Group II.....	1,402,483	30,736	73,255	130,190	58,067	3,663	12,432	28,736	28,736	23,697	9,730	58,395	1,850,208
Group III.....	1,250,071	48,371	96,768	113,245	52,996	3,699	13,884	32,806	38,356	4,311	14,655	71,732	1,740,894
Group IV.....	519,643	24,097	29,441	52,214	30,796	2,179	6,934	12,524	7,206	2,243	5,299	25,918	718,424

GROUP I.—CITIES HAVING A POPULATION OF 300,000 AND OVER IN 1910.

1	Chicago, Ill.....	\$820,868	\$2,400	\$48,447	\$69,912	\$27,931	.....	\$6,174	\$14,671	.....	\$802	\$75,769	\$1,073,247
2	St. Louis, Mo.....	306,525	.....	26,923	38,873	10,068	\$469	7,960	4,192	\$59	866	9,699	407,571
3	Cleveland, Ohio.....	282,466	26,900	4,594	24,942	8,598	.....	2,830	4,725	.....	2,104	10,546	370,570
4	Baltimore, Md.....	190,207	4,200	25,788	17,475	4,065	.....	283	3,229	.....	821	12,587	259,859
5	Detroit, Mich.....	229,973	.....	11,648	27,370	9,089	.....	12,557	.....	.....	.....	6,248	297,035
6	Buffalo, N. Y.....	131,768	12,250	11,253	12,200	4,222	1,111	5,889	4,385	1,369	790	9,895	198,330
7	San Francisco, Cal.....	178,070	.....	1,260	9,328	4,023	1,500	4,023	4,762	.....	1,205	9,210	206,526
8	Milwaukee, Wis.....	128,743	5,250	4,711	11,280	7,968	916	1,995	4,983	2,121	.....	10,212	178,019
9	Newark, N. J.....	122,663	.....	7,282	7,456	1,613	227	1,183	2,182	.....	4,503	6,337	155,729
10	New Orleans, La.....	55,801	3,200	3,440	2,803	456	.....	6,078	.....	.....	341	2,344	74,513
11	Washington, D. C.....	289,873	24,325	6,802	14,209	8,308	2,734	2,691	10,731	4,735	4,123	17,585	386,116
12	Los Angeles, Cal.....	210,643	.....	2,747	10,749	3,180	1,553	4,464	5,960	2,470	2,477	11,882	256,105
13	Minneapolis, Minn.....	191,525	4,384	18,134	13,856	7,549	.....	380	2,743	.....	12,397	.....	251,518

GROUP II.—CITIES HAVING A POPULATION OF 100,000 TO 300,000 IN 1910.

14	Jersey City, N. J.....	\$64,457	.....	\$2,385	\$8,284	\$4,072	.....	\$207	\$1,842	.....	.....	\$1,475	\$83,392
15	Providence, R. I.....	126,253	.....	15,006	11,742	572	.....	1,094	.....	\$812	.....	9,969	177,628
16	St. Paul, Minn.....	109,778	\$1,509	.....	3,971	676	.....	3,227	.....	8,036	\$1,714	4,337	141,532
17	Portland, Oreg.....	68,020	.....	3,044	3,750	310	285	950	2,520	.....	.....	5,162	82,954
18	Columbus, Ohio.....	128,644	11,777	679	9,717	6,165	.....	812	.....	11,018	1,209	2,473	173,494

19	Toledo, Ohio.....	4,930	3,580	3,373	1,152	2,397	6,954	167	103,680
20	Oakland, Cal.....	281	4,418	928	361	1,672	1,599	2,272	98,017
21	Syracuse, N. Y.....	480	9,445	2,914	1,299	4,028	1,111	2,500	106,611
22	New Haven, Conn.....	4,715	7,772	3,510	1,331	1,331	887	981	89,457
23	Birmingham, Ala.....	2,100	3,034	1,321	816	1,359	2,300	610	34,448
24	Memphis, Tenn.....	19,553	1,680	298	140	585	227	210	22,909
25	Scranton, Pa.....	85,695	4,188	5,500	1,026	974	.....	3,777	101,760
26	Patterson, N. J.....	56,019	2,000	.....	500	100	.....	326	61,763
27	Omaha, Nebr.....	72,608	5,153	2,666	79	2,759	1,098	2,679	93,587
28	Grand Rapids, Mich.....	66,885	3,913	2,148	943	320	180	100	8,236
29	Nashville, Tenn.....	23,864	1,070	130	50	200	200	75	26,909
30	Lowell, Mass.....	40,664	4,312	2,803	1,937	199	291	377	58,748
31	Cambridge, Mass.....	81,753	5,071	6,718	865	1,568	4,830	1,873	8,623
32	Spokane, Wash.....	83,837	9,313	3,764	1,247	4,247	5,829	1,092	8,328
33	Albany, N. Y.....	43,778	5,077	2,066	1,540	1,244	403	361	113,425
34	Hartford, Conn.....	\$60,044	\$4,844	\$4,599	\$791	\$3,899	\$8,178	\$546	\$88,039
35	Trenton, N. J.....	28,138	2,485	1,024	.....	673	.....	398	57,653
36	New Bedford, Mass.....	25,241	2,210	1,227	151	427	.....	90	32,403
37	Reading, Pa.....	31,871	3,879	1,161	300	1,095	.....	500	42,706
38	Camden, N. J.....	24,339	4,570	683	342	553	3,156	803	45,921
39	Dallas, Tex.....	39,286	4,185	1,359	2,264	284	1,659	142	52,239
40	Springfield, Mass.....	73,367	10,302	4,895	2,464	4,424	1,867	316	116,891
41	Wilmington, Del.....	30,022	2,941	941	630	227	.....	2,208	38,994
42	Des Moines, Iowa.....	61,213	7,230	4,448	407	535	3,202	9,273	95,656
43	Lawrence, Mass.....	29,566	1,335	1,568	1,081	109	.....	25	36,556
44	Tacoma, Wash.....	58,165	4,077	2,309	185	1,854	3,355	2,482	81,634
45	Kansas City, Kans.....	44,035	5,006	1,861	469	1,213	2,637	610	60,779
46	St. Joseph, Mo.....	37,718	3,284	1,958	1,103	21	788	877	45,700
47	Troy, N. Y.....	34,913	3,568	1,635	15	714	470	1,507	48,700
48	Utica, N. Y.....	29,353	3,949	1,501	.....	451	14	46	38,737
49	Elizabeth, N. J.....	20,132	1,765	637	105	191	.....	688	26,936
50	Schenectady, N. Y.....	29,036	1,440	1,210	.....	274	1,045	1,626	35,987
51	Hoboken, N. J.....	27,003	2,400	754	19	318	1,409	200	38,630
52	Manchester, N. H.....	16,827	1,350	1,109	165	297	449	449	23,250
53	Evansville, Ind.....	36,514	2,750	571	21	730	490	50	44,140

GROUP III.—CITIES HAVING A POPULATION OF 50,000 TO 100,000 IN 1910.

34	Hartford, Conn.....	\$60,044	\$4,844	\$4,599	\$791	\$3,899	\$8,178	\$546	\$81,913	\$88,039
35	Trenton, N. J.....	28,138	2,485	1,024	.....	673	.....	398	1,148	57,653
36	New Bedford, Mass.....	25,241	2,210	1,227	151	427	.....	90	549	32,403
37	Reading, Pa.....	31,871	3,879	1,161	300	1,095	.....	500	500	42,706
38	Camden, N. J.....	24,339	4,570	683	342	553	3,156	803	8,977	45,921
39	Dallas, Tex.....	39,286	4,185	1,359	2,264	284	1,659	142	.....	52,239
40	Springfield, Mass.....	73,367	10,302	4,895	2,464	4,424	1,867	316	3,356	116,891
41	Wilmington, Del.....	30,022	2,941	941	630	227	.....	2,208	38,994	38,994
42	Des Moines, Iowa.....	61,213	7,230	4,448	407	535	3,202	9,273	9,273	95,656
43	Lawrence, Mass.....	29,566	1,335	1,568	1,081	109	.....	25	349	36,556
44	Tacoma, Wash.....	58,165	4,077	2,309	185	1,854	3,355	2,482	800	81,634
45	Kansas City, Kans.....	44,035	5,006	1,861	469	1,213	2,637	610	1,541	60,779
46	St. Joseph, Mo.....	37,718	3,284	1,958	1,103	21	788	877	877	45,700
47	Troy, N. Y.....	34,913	3,568	1,635	15	714	470	1,507	4,264	48,700
48	Utica, N. Y.....	29,353	3,949	1,501	.....	451	14	46	2,849	38,737
49	Elizabeth, N. J.....	20,132	1,765	637	105	191	.....	688	1,294	26,936
50	Schenectady, N. Y.....	29,036	1,440	1,210	.....	274	1,045	1,626	1,626	35,987
51	Hoboken, N. J.....	27,003	2,400	754	19	318	1,409	200	2,501	38,630
52	Manchester, N. H.....	16,827	1,350	1,109	165	297	449	449	755	23,250
53	Evansville, Ind.....	36,514	2,750	571	21	730	490	50	1,214	44,140

TABLE 18.—Showing expenses of instruction, operation, and maintenance of secondary schools in 103 cities of 30,000 population and over, 1909—Cont'd.

GROUP III.—CITIES HAVING A POPULATION OF 50,000 TO 100,000 IN 1910.

Cities.	Salaries of teachers.	Salaries and expenses of super- visors.	Text- books and station- ery and general school supplies.	Janitors, engi- neers, and firemen.	Fuel.	Water.	Light and power.	Janitors' supplies and sundry expenses.	Appara- tus and manual training equip- ment.	School libraries.	Repairs and replace- ments of equip- ment.	Repairs to buildings.	Total.
54 Norfolk, Va.....	\$13,018	.....	322	800	180	.....	19	90	.....	.....	1,438	(1)	14,429
55 Wilkes-Barre, Pa.....	23,400	62	1,155	1,200	303	32	124	445	785	.....	.....	.....	28,944
56 Peoria, Ill.....	22,815	2,500	340	1,560	1,075	.....	119	91	439	.....	200	868	29,807
57 Erie, Pa.....	21,767	5,188	4,534	2,520	1,454	.....	350	1,918	.....	.....	.....	334	38,265
58 Savannah, Ga.....	14,649	1,500	.....	806	181	.....	82	60	679	.....	.....	.....	17,957
59 Oklahoma, Okla.....	30,364	.....	2,500	990	350	.....	.....	.....	.....	.....	700	1,031	35,935
60 Harrisburg, Pa.....	35,592	.....	3,973	3,234	1,705	39	379	75	2,268	.....	427	2,236	49,928
61 Charleston, S. C.....	11,411	.....	.....	300	.....	.....	.....	2,156	.....	.....	.....	790	14,657
62 Portland, Me.....	33,057	.....	4,073	2,640	1,501	.....	165	260	.....	.....	.....	3,051	44,837
63 East St. Louis, Ill.....	19,926	1,600	301	1,475	610	337	167	135	.....	90	269	399	21,315
64 Holyoke, Mass.....	28,848	792	2,615	4,337	3,638	190	1,623	900	.....	.....	582	1,899	45,514
65 Jacksonville, Fla.....	13,125	.....	.....	375	210	.....	.....	556	.....	.....	579	1,802	16,641
66 Brockton, Mass.....	40,625	.....	6,109	4,713	1,656	298	155	2,342	835	275	.....	1,009	58,647
67 Bayonne, N. J.....	18,290	.....	1,889	1,240	494	.....	.....	1,208	.....	.....	.....	1,005	24,126
68 Johnstown, Pa.....	20,619	2,300	5,310	1,480	270	74	8	.....	.....	.....	.....	2,196	32,257
69 Passaic, N. J.....	22,807	.....	4,257	960	450	66	196	65	2,605	.....	.....	.....	31,406
70 Wichita, Kans.....	15,849	1,933	362	1,181	650	.....	.....	523	.....	.....	.....	462	20,900
71 Covington, Ky.....	11,552	.....	.....	960	256	93	142	456	.....	.....	79	2,271	15,809
72 Allentown, Pa.....	16,010	.....	1,769	725	1,000	500	.....	500	.....	410	.....	500	20,914
73 Springfield, Ill.....	24,107	.....	1,72	1,380	552	.....	101	1,809	140	.....	1,052	2,075	31,288
74 Saginaw, Mich.....	47,205	900	1,944	5,930	2,325	424	210	699	2,225	644	400	2,000	64,906
75 Canton, Ohio.....	21,652	1,520	4,144	1,620	646	.....	12	44	.....	.....	37	1,120	30,795

GROUP IV.—CITIES HAVING A POPULATION OF 30,000 TO 50,000 IN 1910.

76 Sioux City, Iowa.....	\$20,912	.....	\$1,077	\$2,948	\$1,290	\$172	\$143	\$500	.....	.....	\$1,000	\$1,120	\$28,762
77 Lancaster, Pa.....	16,600	.....	1,500	1,884	1,500	80	.....	500	.....	.....	.....	3,019	26,083
78 Atlantic City, N. J.....	22,807	.....	1,200	2,000	1,500	2500	.....	1,800	.....	.....	.....	.....	29,907
79 Little Rock, Ark.....	15,310	.....	400	1,425	1,780	100	70	190	.....	.....	150	600	19,025
80 Rockford, Ill.....	25,486	.....	247	4,965	2,575	.....	907	909	\$987	.....	96	3,293	39,165

81	Bay City, Mich.	26,125	\$3,200	1,150	1,710	975	88	60	310	37	1,878	35,533
82	York, Pa.	15,276	459	2,210	1,020	856	158	573	100	100	218	21,470
83	Sacramento, Cal.	25,600	3,000	2,440	2,760	214	.....	130	1,105	431	845	36,834
84	Chatanooga, Tenn.	10,818	.....	320	7,450	250	29	13	250	.....	.....	12,045
85	Malden, Mass.	38,412	1,040	5,253	3,686	4,446	.....	841	350	.....	.....	54,028
86	Pueblo, Colo.	27,615	.....	1,024	3,161	742	.....	62	228	499	1,345	34,726
87	Haverhill, Mass.	23,107	540	2,573	1,170	1,170	.....	510	28	.....	.....	30,105
88	New Britain, Conn.	12,818	3,265	510	1,678	1,127	.....	216	370	.....	370	20,801
89	Topeka, Kans.	33,945	.....	240	2,670	2,766	98	886	140	.....	2,756	43,534
90	Davenport, Iowa.	27,335	7,329	255	6,200	1,859	.....	375	454	775	.....	46,430
91	Wheeling, W. Va.	11,150	996	474	480	291	.....	54	1,016	193	347	15,001
92	Chester, Pa.	11,388	.....	.....	1,500	.....	.....	.....	1,200	.....	.....	14,088
93	Dubuque, Iowa	14,875	1,800	61	1,130	627	727	362	289	139	315	20,882
94	Woonsocket, R. I.	8,460	45	337	560	297	25	26	97	22	296	10,266
95	Racine, Wis.	16,540	2,154	912	1,350	991	.....	360	267	420	842	26,060
96	Knoxville, Tenn.	10,632	.....	197	657	230	34	34	135	641	1,020	13,580
97	Newcastle, Pa.	15,218	.....	2,959	810	235	10	184	787	30	566	20,799
98	Joliet, Ill.	21,315	.....	361	2,305	964	.....	287	90	34	300	25,907
99	Auburn, N. Y.	18,510	.....	142	883	1,044	100	209	197	154	1,391	22,599
100	Taunton, Mass.	12,900	260	722	1,328	1,959	58	19	985	.....	1,020	19,314
101	Oshkosh, Wis.	15,107	.....	1,044	1,563	1,246	.....	416	191	732	1,012	22,100
102	Joplin, Mo.	11,948	.....	1,210	810	583	.....	154	211	.....	.....	16,463
103	Newport, Ky.	9,474	.....	14	840	209	.....	43	.....	.....	2,388	13,207

¹ Included in expenses for repairs and replacements of equipment.

² Estimate.

TABLE 19.—Showing total cost of instruction, operation, and maintenance of normal, evening, vacation, and special schools in 103 cities of 30,000 population and over, 1909.

Cities.	Normal schools.	Evening schools.	Vacation schools.	Special schools.	Total.
Grand total.....	\$341,328	\$912,464	\$96,849	\$208,869	\$1,559,510
Group I.....	310,768	563,168	78,811	167,159	1,119,906
Group II.....	2,890	173,926	8,714	16,687	202,217
Group III.....	27,670	140,753	8,540	18,679	195,642
Group IV.....		34,617	784	6,344	41,745

GROUP I.—CITIES HAVING A POPULATION OF 300,000 OR OVER IN 1910.

1	Chicago, Ill.....	\$115,356	\$159,307	\$15,000	\$46,449	\$336,112
2	St. Louis, Mo.....	57,792	31,766	5,495	44,858	139,911
3	Cleveland, Ohio.....	60,185	27,012	12,162	10,569	109,928
4	Baltimore, Md.....		23,332			23,332
5	Detroit, Mich.....		25,580	10,871	9,422	45,873
6	Buffalo, N. Y.....	3,870	33,823	4,492		42,185
7	San Francisco, Cal.....		72,447		13,419	85,866
8	Milwaukee, Wis.....		19,148	2,334	42,442	63,924
9	Newark, N. J.....	13,590	123,246	27,397		164,233
10	New Orleans, La.....	21,472	15,756			37,228
11	Washington, D. C.....	38,503	21,363			59,866
12	Los Angeles, Cal.....		8,234			8,234
13	Minneapolis, Minn.....		2,154	1,060		3,214

GROUP II.—CITIES HAVING A POPULATION OF 100,000 TO 300,000 IN 1910.

14	Jersey City, N. J.....		\$16,306	\$1,238		\$17,544
15	Providence, R. I.....		39,230			39,230
16	St. Paul, Minn.....			1,933		1,933
17	Portland, Oreg.....		4,460		\$12,514	16,974
18	Columbus, Ohio.....	\$2,890	634			3,524
19	Toledo, Ohio.....					
20	Oakland, Cal.....		10,151			10,151
21	Syracuse, N. Y.....		6,079	410		6,489
22	New Haven, Conn.....		7,169	2,000		9,169
23	Birmingham, Ala.....					
24	Memphis, Tenn.....		1,993			1,993
25	Scranton, Pa.....		12,100			12,100
26	Patersea, N. J.....		8,156			8,156
27	Omaha, Nebr.....		5,465			5,465
28	Grand Rapids, Mich.....		8,571	1,476	4,173	14,220
29	Nashville, Tenn.....		2,366			2,366
30	Lowell, Mass.....		23,863			23,863
31	Cambridge, Mass.....		15,832	1,657		17,489
32	Spokane, Wash.....		1,482			1,482
33	Albany, N. Y.....		10,069			10,069

GROUP III.—CITIES HAVING A POPULATION OF 50,000 TO 100,000 IN 1910.

34	Hartford, Conn.....		\$19,787	\$4,217		\$24,004
35	Trenton, N. J.....		6,296		\$13,733	20,029
36	New Bedford, Mass.....	\$13,668	6,771			20,439
37	Reading, Pa.....		5,156			5,156
38	Camden, N. J.....		2,766			2,766
39	Dallas, Tex.....		1,840			1,840
40	Springfield, Mass.....		13,187		3,770	16,957
41	Wilmington, Del.....		1,643			1,643
42	Des Moines, Iowa.....		1,001	3,227		4,228
43	Lawrence, Mass.....		12,654	1,096		13,750
44	Tacoma, Wash.....					
45	Kansas City, Kans.....					
46	St. Joseph, Mo.....					
47	Troy, N. Y.....		3,236			3,236
48	Utica, N. Y.....		3,467			3,467

TABLE 19.—Showing total cost of instruction, operation, and maintenance of normal, evening, vacation, and special schools in 103 cities of 30,000 population and over, 1909—Continued.

GROUP III.—CITIES HAVING A POPULATION OF 50,000 TO 100,000 IN 1910—Continued.

	Cities.	Normal schools.	Evening schools.	Vacation schools.	Special schools.	Total.
49	Elizabeth, N. J.....	\$2,453	\$9,683			\$12,136
50	Schenectady, N. Y.....		3,893			3,893
51	Hoboken, N. J.....		7,746			7,746
52	Manchester, N. H.....		1,931			1,931
53	Evansville, Ind.....		906			906
54	Norfolk, Va.....		812			812
55	Wilkes-Barre, Pa.....		1,429			1,429
56	Peoria, Ill.....		970			970
57	Eric, Pa.....	1,584	1,465			3,049
58	Savannah, Ga.....		1,515			1,515
59	Oklahoma, Okla.....		1,556			1,556
60	Harrisburg, Pa.....	1,023	747			1,770
61	Charleston, S. C.....					
62	Portland, Me.....		1,348			1,348
63	East St. Louis, Ill.....		832			832
64	Holyoke, Mass.....		7,813			7,813
65	Jacksonville, Fla.....					
66	Brockton, Mass.....		5,178			5,178
67	Bayonne, N. J.....		5,691			5,691
68	Johnstown, Pa.....					
69	Passaic, N. J.....		5,426			5,426
70	Wichita, Kans.....	2,589				2,589
71	Covington, Ky.....		230			230
72	Allentown, Va.....		1,100			1,100
73	Springfield, Ill.....	5,083	508			5,591
74	Saginaw, Mich.....	1,270	2,170		\$1,176	4,616
75	Canton, Ohio.....					

GROUP IV.—CITIES HAVING A POPULATION OF 30,000 TO 50,000 IN 1910.

76	Sioux City, Iowa.....					
77	Lancaster, Pa.....		\$2,583			\$2,583
78	Atlantic City, N. J.....		1,241			1,241
79	Little Rock, Ark.....					
80	Rockford, Ill.....		345			345
81	Bay City, Mich.....		438		\$1,112	1,550
82	York, Pa.....					
83	Sacramento, Cal.....		10,077		1,204	11,281
84	Chattanooga, Tenn.....					
85	Malden, Mass.....		5,617			5,617
86	Pueblo, Colo.....					
87	Haverhill, Mass.....		2,447	\$784		3,231
88	New Britain, Conn.....		3,135			3,135
89	Topeka, Kans.....					
90	Davenport, Iowa.....					
91	Wheeling, W. Va.....					
92	Chester, Pa.....					
93	Dubuque, Iowa.....					
94	Woonsocket, R. I.....		2,421			2,421
95	Racine, Wis.....		1,600		3,052	4,652
96	Knoxville, Tenn.....					
97	New Castle, Pa.....					
98	Joliet, Ill.....		353			353
99	Auburn, N. Y.....		808			808
100	Taunton, Mass.....		3,049			3,049
101	Oshkosh, Wis.....		563		976	1,479
102	Joplin, Mo.....					
103	Newport, Ky.....					

TABLE 20.—Showing combined expenses of instruction, operation, and maintenance of schools of all kinds in 103 cities of 80,000 population and over, 1909.

Cities.	Salaries of teachers.	Salaries and expenses of supervisors.	Text-books, stationery, and general school supplies.	Janitors, engineers, and firemen.	Fuel.	Water.	Light and power.	Janitors' supplies and sundry expenses.	Apparatus and manual training equipment.	School libraries.	Repairs and replacement of equipment.	Repairs to buildings.	Total.
Grand total.....	\$38,865,622	\$1,214,245	\$1,847,202	\$9,902,220	\$1,756,634	\$113,302	\$249,987	\$830,746	\$836,896	\$89,743	\$495,931	\$3,192,316	\$52,944,844
Group I.....	21,172,364	523,011	897,403	2,103,590	797,226	52,423	140,041	444,919	184,216	37,845	265,709	1,816,099	28,434,846
Group II.....	7,804,582	241,334	358,725	780,702	402,671	27,714	39,363	140,652	101,998	30,097	69,020	586,149	10,583,007
Group III.....	7,146,568	314,118	460,693	720,221	389,069	22,033	50,911	159,918	73,020	16,072	102,322	575,330	10,030,275
Group IV.....	2,742,108	135,782	130,381	297,707	167,668	11,132	19,672	85,257	27,662	5,729	58,880	214,738	3,896,716

GROUP I.—CITIES HAVING A POPULATION OF 300,000 OR OVER IN 1910.

1 Chicago, Ill.....	\$6,579,729	\$27,900	\$207,143	\$762,188	\$292,479	.....	\$32,381	\$46,532	\$38,337	\$17,237	\$8,449	\$737,688	\$8,770,063
2 St. Louis, Mo.....	1,895,900	41,972	110,184	189,283	44,229	85,902	16,785	36,465	8,165	1,643	11,714	91,450	2,453,692
3 Cleveland, Ohio.....	1,478,793	140,335	24,723	178,623	68,288	.....	15,245	93,044	7,986	.....	6,988	114,312	2,128,337
4 Baltimore, Md.....	1,273,175	7,195	92,196	120,448	59,586	.....	11,480	483	6,052	.....	11,122	130,554	1,712,291
5 Detroit, Mich.....	1,262,291	13,500	55,830	141,773	47,750	.....	11,458	38,209	36,997	.....	.....	45,440	1,642,188
6 Buffalo, N. Y.....	994,591	128,375	62,749	93,279	47,205	14,550	13,094	44,210	15,904	5,720	33,205	86,977	1,539,859
7 San Francisco, Cal.....	1,305,529	8,697	145,379	100,552	10,552	14,000	5,233	42,647	3,972	.....	19,777	68,622	1,624,408
8 Milwaukee, Wis.....	1,037,159	21,595	18,907	71,825	47,678	12,419	11,275	5,091	24,495	4,307	.....	99,371	1,553,622
9 Newark, N. J.....	1,882,792	27,334	72,659	101,878	36,071	5,402	16,430	16,569	9,315	.....	69,556	98,619	1,886,555
10 New Orleans, La.....	631,103	13,200	50,472	42,866	7,842	.....	1,100	61,723	.....	.....	26,836	78,211	913,353
11 Washington, D. C.....	1,374,587	84,607	84,331	104,377	74,694	.....	8,385	19,918	21,780	5,150	10,746	191,444	1,980,019
12 Los Angeles, Cal.....	1,036,209	16,998	16,331	62,358	46,863	150	8,175	18,734	8,470	3,788	10,089	53,411	1,234,078
13 Minneapolis, Minn.....	1,020,636	.....	93,981	89,633	43,869	.....	.....	21,294	2,743	.....	57,227	.....	1,346,381

GROUP II.—CITIES HAVING A POPULATION OF 100,000 TO 300,000 IN 1910.

14 Jersey City, N. J.....	\$715,866	\$9,686	\$31,588	\$54,842	\$34,820	.....	\$2,684	\$5,764	\$17,811	\$170	\$5,514	\$45,655	\$924,400
15 Providence, R. I.....	632,152	11,458	40,182	66,126	50,607	55,455	3,231	4,364	.....	.....	7,583	80,668	901,568
16 St. Paul, Minn.....	550,784	8,223	2,000	96,555	26,252	4,431	.....	17,361	.....	8,036	.....	26,023	739,667
17 Portland, Oreg.....	495,255	.....	17,357	33,652	9,812	2,757	3,175	5,322	12,959	84	.....	46,769	627,372
18 Columbus, Ohio.....	429,719	81,373	17,278	33,520	23,769	.....	.....	4,608	11,996	11,018	10,331	17,350	660,962

GROUP III.—CITIES HAVING A POPULATION OF 50,000 TO 100,000 IN 1910.

19	Toledo, Ohio.....	480,175	4,000	25,440	28,229	26,731	1,784	24,449	14,169	6,823	9,688	621,493
20	Oakland, Cal.....	460,356	.....	11,869	29,807	5,621	2,206	5,388	6,821	11,865	31,755	571,104
21	Syracuse, N. Y.....	402,174	1,200	15,389	38,077	33,651	4,164	12,477	3,465	.....	22,651	538,248
22	New Haven, Conn.....	374,831	37,450	20,433	45,939	25,552	2,595	10,231	1,475	1,167	7,373	529,316
23	Birmingham, Ala.....	107,433	14,533	932	9,819	4,469	777	1,715	2,300	270	5,411	148,753
24	Memphis, Tenn.....	206,031	8,110	9,932	22,019	5,893	1,593	3,009	.....	227	6,841	271,290
25	Scranton, Pa.....	333,589	.....	34,705	44,592	20,647	5,773	2,972	.....	.....	16,185	509,363
26	Paterson, N. J.....	384,826	1,000	11,800	26,670	8,572	1,095	8,007	.....	4,037	56,848	496,735
27	Omaha, Nebr.....	383,589	.....	19,843	40,141	21,592	966	7,038	6,334	2,353	34,890	516,726
28	Grand Rapids, Mich.....	346,647	48,175	15,897	33,215	12,754	1,600	2,263	4,821	610	44,691	517,062
29	Nashville, Tenn.....	197,489	5,300	4,893	14,385	3,667	710	2,954	.....	200	1,676	28,940
30	Lowell, Mass.....	273,518	.....	14,152	46,012	20,637	1,487	4,576	306	.....	40,513	360,212
31	Cambridge, Mass.....	346,479	1,192	12,006	42,380	11,614	3,116	3,846	12,385	.....	20,539	484,203
32	Spokane, Wash.....	370,994	4,832	34,402	34,447	20,224	1,973	19,222	6,659	1,547	17,241	511,641
33	Albany, N. Y.....	262,675	4,700	19,127	21,285	18,903	2,552	3,073	4,97	1,896	2,582	358,888
34	Hartford, Conn.....	\$331,885	\$36,040	\$29,022	\$33,315	\$21,770	\$3,119	\$19,744	\$8,178	\$1,744	\$23,586	\$509,824
35	Trenton, N. J.....	293,507	5,305	19,033	22,540	13,089	.....	10,318	.....	180	9,491	386,001
36	New Bedford, Mass.....	210,989	8,945	17,069	24,543	16,277	.....	4,300	1,666	.....	19,456	305,399
37	Reading, Pa.....	196,238	1,595	15,944	28,248	11,614	.....	3,592	8,822	.....	7,599	299,552
38	Camden, N. J.....	285,617	1,000	23,603	34,603	12,924	369	2,902	6,023	.....	8,906	400,826
39	Dallas, Tex.....	162,497	30,113	2,932	34,103	3,439	.....	1,634	1,639	1,651	4,664	223,971
40	Springfield, Mass.....	317,879	29,112	25,976	37,460	29,136	.....	11,855	6,320	.....	17,159	483,621
41	Wilmington, Del.....	173,075	.....	10,619	13,450	9,987	.....	2,014	1,058	.....	15,780	225,983
42	Des Moines, Iowa.....	324,212	14,067	30,760	37,011	18,410	2,436	2,617	6,000	.....	32,733	469,633
43	Lawrence, Mass.....	199,885	8,420	11,369	19,720	15,065	2,859	4,925	.....	269	13,972	276,434
44	Tacoma, Wash.....	240,638	27,131	15,032	21,702	10,134	1,634	6,130	4,286	599	5,922	339,463
45	Kansas City, Kans.....	180,377	.....	5,935	17,876	9,179	1,626	2,764	3,365	212	1,138	234,632
46	St. Joseph, Mo.....	192,532	4,410	3,945	29,369	10,055	32	154	1,976	650	8,843	254,021
47	Troy, N. Y.....	192,270	7,623	7,307	21,623	16,829	15	3,784	5,83	2,645	36,425	297,382
48	Utica, N. Y.....	189,442	.....	6,162	21,311	14,581	336	5,585	137	117	9,574	249,009
49	Elizabeth, N. J.....	143,584	2,700	15,732	13,913	6,471	684	1,708	.....	90	7,592	199,753
50	Schenectady, N. Y.....	174,480	7,130	4,927	10,941	10,790	2,204	1,369	1,779	1,393	15,567	231,193
51	Hoboken, N. J.....	249,760	.....	16,664	17,381	7,156	1,263	4,043	1,740	.....	32,277	333,822
52	Manchester, N. H.....	111,169	.....	6,620	7,735	11,477	1,330	1,596	4,717	.....	7,505	203,711
53	Evansville, Ind.....	155,718	21,806	3,524	17,948	5,718	161	4,717	490	.....	13,140	223,718
54	Norfolk Va.....	119,858	.....	2,508	12,591	3,145	.....	1,192	647	.....	5,462	138,540
55	Wilkes-Barre, Pa.....	147,323	2,250	15,356	.....	7,954	547	1,984	785	14,039	16,444	207,338

TABLE 20.—Showing combined expenses of instruction, operation, and maintenance of schools of all kinds in 103 cities of 30,000 population and over, 1909—Continued.

GROUP III.—CITIES HAVING A POPULATION OF 50,000 TO 100,000 IN 1910.

Cities.	Salaries of teachers.	Salaries and expenses of supervisors.	Text-books, stationery, and general school supplies.	Janitors, engineers, and firemen.	Fuel.	Water.	Light and power.	Janitors' supplies and sundry expenses.	Apparatus and manual training equipment.	School libraries.	Repairs and replacements of equipment.	Repairs to buildings.	Total.
Peoria, Ill.	\$195,386	\$9,107	\$3,735	\$16,745	\$6,659		\$821	\$470	\$4,388			\$12,316	\$249,027
Erie, Pa.	122,298	20,873	12,701	16,335	9,023		1,839	2,969	185			4,851	192,173
Savannah, Ga.	106,555	1,500	4,929	4,929	1,809		109	598	679			11,887	177,866
58 Oklahoma, Okla.	133,301	5,000	8,988	9,920	3,525			859	2,268			10,240	177,494
60 Harrisburg, Pa.	158,995	2,800	20,988	20,859	9,000	\$308	1,275					12,140	235,562
61 Charleston, S. C.	58,301		262	1,600	12,123			10,781				3,947	74,891
62 Portland, Me.	170,295	4,300	12,997	21,330	3,931	199	1,208	2,607	1,294	\$536		17,212	245,213
63 East St. Louis, Ill.	104,555	22,893	4,703	21,067	1,991	1,991	524	1,583	1,199	1,004		7,161	172,207
64 Holyoke, Mass.	159,663	4,286	11,315	16,439	12,014	1,565	2,922	3,455				21,419	235,499
65 Jacksonville, Fla.	57,436			2,773	842			2,223	136			6,103	71,828
66 Brockton, Mass.	169,860	3,000	18,488	18,121	15,522	742	837	6,007	895	275		10,959	244,706
67 Bayonne, N. J.	198,910	2,340	17,133	15,702	6,491			8,995	758			21,005	274,834
68 Johnston, Pa.	111,111	4,700	11,444	13,822	4,270	1,090	108					26,133	173,287
69 Passaic, N. J.	146,841		12,800	11,698	7,020			2,007	2,605	58		11,121	198,116
70 Wichita, Kans.	90,786	3,653	3,197	8,238	3,577			4,974	491			14,866	131,563
71 Covington, Ky.	90,315	5,030	166	8,280	2,005	403	617	1,994				13,962	123,182
72 Allentown, Pa.	99,887	1,545	8,264	10,776	5,797		425	3,389		410		16,709	148,011
73 Springfield, Ill.	127,116	6,484	574	11,098	3,984		217	4,955	4,692			14,814	177,100
74 Saginaw, Mich.	154,297	5,200	8,580	19,796	9,315	1,580	1,014	2,471	5,367	4,448		12,352	225,961
75 Canton, Ohio.	106,925	3,760	14,230	13,320	4,959		26	435				5,604	149,549

GROUP IV.—CITIES HAVING A POPULATION OF 30,000 TO 50,000 IN 1910.

76 Sioux City, Iowa.	\$138,244	\$1,700	\$2,844	\$17,162	\$11,080	\$999	\$270	\$3,794	\$6,741			\$13,446	\$189,539
77 Lancaster, Pa.	84,273			12,000	6,142	605	526	4,137				9,839	128,655
78 Atlantic City, N. J.	111,573		11,999	9,991	10,736	1 3,500		18,338				1,070	177,227
79 Little Rock, Ark.	87,963	3,300	2,947	6,662	4,084	1,092	565	1,189				3,399	113,680
80 Rockford, Ill.	105,882	4,896	881	15,979	9,570		1,243	4,755	2,491			13,513	199,336

81	Bay City, Mich.	108,348	14,350	6,060	12,045	5,370	732	323	1,642	.....	.....	.....	398	10,355	159,623
82	York, Pa.	93,242	2,285	10,247	11,566	6,149	918	945	.....	.....	.....	.....	938	7,589	135,909
83	Sacramento, Cal.	164,449	5,500	7,871	15,136	1,809	.....	1,408	3,535	1,536	1,111	.....	2,432	7,097	212,244
84	Chattanooga, Tenn.	67,253	.....	1,513	3,834	1,982	306	78	1,482	.....	.....	.....	.....	5,348	81,796
85	Malden, Mass.	158,351	3,380	13,196	15,813	15,997	.....	1,797	895	.....	.....	.....	678	9,245	219,352
86	Pueblo, Colo.	128,499	8,004	5,673	15,325	4,709	435	680	1,377	.....	50	.....	2,802	6,005	173,559
87	Haverhill, Mass.	126,155	2,450	9,175	11,927	8,911	.....	803	615	924	.....	.....	946	10,257	172,163
88	New Britain, Conn.	81,346	5,234	10,688	9,375	8,076	.....	2,046	786	.....	.....	.....	.....	3,014	121,292
89	Topeka, Kans.	148,308	1,710	3,350	15,246	5,162	214	1,701	990	1,773	270	.....	772	11,268	193,764
90	Davenport, Iowa.	117,567	29,727	1,268	15,754	5,939	.....	423	1,329	3,303	358	.....	8,564	23,997	208,229
91	Wheeling, W. Va.	95,436	15,725	1,696	6,660	4,415	.....	1,043	3,132	1,040	.....	.....	1,595	12,232	142,975
92	Chester, Pa.	78,880	.....	5,111	11,042	.....	.....	19,049	.....	.....	.....	.....	.....	.....	114,082
93	Dubuque, Iowa.	67,997	6,850	701	8,415	5,272	783	432	531	1,400	478	.....	450	7,849	110,258
94	Woonsocket, R. I.	61,557	2,350	4,856	7,114	7,106	519	252	1,028	95	265	.....	973	5,823	91,938
95	Racine, Wis.	102,142	6,461	2,239	9,801	4,773	.....	1,076	1,200	3,858	873	.....	1,081	2,986	136,490
96	Knoxville, Tenn.	57,604	665	898	5,204	1,198	244	65	744	.....	.....	.....	3,446	4,031	74,099
97	New Castle, Pa.	94,581	3,330	10,254	11,040	3,060	30	979	3,721	.....	.....	.....	95	9,882	136,972
98	Joliet, Ill.	77,447	2,446	3,111	11,563	5,282	.....	609	1,314	84	167	.....	695	5,343	107,761
99	Anburn, N. Y.	80,698	2,800	2,293	8,030	6,684	408	432	1,800	1,419	122	.....	.....	3,007	112,703
100	Taunton, Mass.	93,803	2,600	4,528	10,200	11,755	347	283	5,042	184	.....	.....	.....	6,763	135,505
101	Oshkosh, Wis.	69,217	6,299	2,328	8,373	5,266	.....	1,232	790	1,314	1,261	.....	2,749	3,010	101,839
102	Joplin, Mo.	72,953	1,260	3,631	6,210	2,673	.....	154	1,554	1,500	47	.....	23,297	.....	113,279
103	Newport, Ky.	53,540	2,450	1,023	6,240	1,458	.....	247	1,138	.....	.....	.....	.....	8,071	74,167

1 Estimate.

TABLE 21.—Showing miscellaneous expenses of school systems in 103 cities of 30,000 population and over, 1909.

City.	School census and elections.	Traut officers and police.	Medical inspection and nurses.	Pensions.	Rent.	Insurance.	Transportation of pupils.	Payments to schools and institutions.	Other miscellaneous expenses.	Total.
Grand total.....	\$73,029	\$204,240	\$100,333	\$168,433	\$241,005	\$158,588	\$32,910	\$420,644	\$118,730	\$1,517,912
Group I.....	34,583	107,779	63,038	122,727	167,190	22,566	13,204	305,389	54,042	890,578
Group II.....	16,202	30,900	14,709	21,291	34,493	49,929	49,668	37,793	45,842	251,887
Group III.....	15,386	45,987	18,647	24,415	32,357	59,401	13,860	62,077	6,415	278,545
Group IV.....	6,798	19,574	3,939	.....	6,965	26,692	5,118	15,385	12,431	96,902

GROUP I.—CITIES HAVING A POPULATION OF 300,000 OR OVER IN 1910.

1 Chicago, Ill.....	\$5,278	\$46,884	\$24,700	\$67,883	\$52,160	\$99	\$8,991	\$122,481	\$33,070	\$361,546
2 St. Louis, Mo.....	4,500	14,667	2,500	.....	4,159	2,256	4,058	73,243	8,029	113,412
3 Cleveland, Ohio.....	3,583	9,553	.....	6,178	1,608	1,014	.....	33,126	.....	55,040
4 Baltimore, Md.....	.....	9,020	6,000	.....	47,089	155	.....	9,007	1,825	73,096
5 Detroit, Mich.....	4,522	8,000	6,750	12,552	2,750	194	.....	.....	.....	34,738
6 Buffalo, N. Y.....	.....	7,840	2,600	15,057	4,875	5,939	.....	13,138	.....	49,449
7 San Francisco, Cal.....	8,127	.....	.....	6,020	7,513	.....	.....	28,308	589	50,557
8 Milwaukee, Wis.....	2,197	5,250	.....	.....	1,920	.....	215	.....	2,993	12,175
9 Newark, N. J.....	.....	.....	7,247	15,057	5,649	2,180	.....	14,036	6,457	50,626
10 New Orleans, La.....	.....	.....	3,900	.....	9,060	.....	.....	.....	1,479	14,439
11 Washington, D. C.....	.....	2,365	6,091	.....	23,805	.....	.....	12,050	.....	44,311
12 Los Angeles, Cal.....	6,376	2,000	3,250	.....	5,254	3,520	.....	.....	.....	20,400
13 Minneapolis, Minn.....	.....	2,200	.....	.....	1,350	7,209	.....	.....	.....	10,759

GROUP II.—CITIES HAVING A POPULATION OF 100,000 TO 300,000 IN 1910.

14 Jersey City, N. J.....	\$1,867	\$2,125	\$1,833	\$3,697	.....	\$8,915	.....	.....	\$1,603	\$18,173
15 Providence, R. I.....	.....	3,752	1,565	7,308	.....	154	.....	\$5,822	.....	21,498
16 St. Paul, Minn.....	.....	900	.....	.....	2,047	305	.....	.....	.....	3,252
17 Portland, Ore.....	445	1,200	803	.....	610	10,639	.....	.....	16,576	30,273
18 Columbus, Ohio.....	1,616	1,650	.....	.....	.....	.....	.....	4,804	.....	8,070
19 Toledo, Ohio.....	1,012	2,806	.....	.....	.....	.....	.....	.....	.....	3,818
20 Oakland, Cal.....	2,512	720	.....	.....	40	587	.....	.....	.....	3,859

GROUP III.—CITIES HAVING A POPULATION OF 50,000 TO 100,000 IN 1910.

21	Syracuse, N. Y.	1,920	4,131	5,041	1,620	1,953	10,245	15,500	40,410
22	New Haven, Conn.	1,337	1,770		3,474	5,546			13,029
23	Birmingham, Ala.	543			492	3,028	1,075		5,138
24	Memphis, Tenn.	1,117			1,639	4,084			6,840
25	Scranton, Pa.				8,127	1,614			10,920
26	Paterson, N. J.		1,500	3,078	13,267	264	948		19,057
27	Omaha, Nebr.	2,309			228	2,072	375		6,280
28	Grand Rapids, Mich.	1,826			646			281	4,083
29	Nashville, Tenn.	875	500		1,200	4,864			7,439
30	Lowell, Mass.	4,291			1,278	1,944	8325	11,707	19,001
31	Cambridge, Mass.	537	2,607	1,528	170	324	2,735		11,551
32	Spokane, Wash.	691			4,390			10,621	16,782
33	Albany, N. Y.	1,674	639		19		82		2,414
34	Hartford, Conn.	\$1,133	\$1,350	\$1,800	\$2,200	\$7,011	\$730		\$14,224
35	Trenton, N. J.	555	1,185	1,289	4,170	2,468		\$1,535	14,182
36	New Bedford, Mass.		3,419		2,261		509		15,124
37	Reading, Pa.		720	107	116	904			2,991
38	Camden, N. J.		2,880	2,400		672			10,065
39	Dallas, Tex.	846			575	1,584			3,005
40	Springfield, Mass.	450	2,375	2,846		1,129	543		7,343
41	Wilmington, Del.	279			264	363			906
42	Des Moines, Iowa.	694	1,485	790		1,763	882	2,413	12,435
43	Lawrence, Mass.	722	3,500	2,500	1,380	250		714	11,266
44	Tacoma, Wash.	1,405	720			3,232		1,754	7,111
45	Kansas City, Kans.	540	936			1,239			2,715
46	St. Joseph, Mo.	1,292	900	420	378	452			3,442
47	Troy, N. Y.	80	1,500		1,940	595		200	24,481
48	Utica, N. Y.		1,800		2,860	4,435			9,095
49	Elizabeth, N. J.		400	950	700	2,037	34	1,225	6,493
50	Schenectady, N. Y.		1,500	900	2,746	30			5,266
51	Hoboken, N. J.		2,200		1,500	2,140	1,502		10,676
52	Manchester, N. H.	973	1,150		128	822			3,073
53	Evansville, Ind.	450	840		230	460		421	2,421
54	Norfolk, Va.				1,755	25			1,780
55	Wilkes-Barre, Pa.	415				900			1,315
56	Peoria, Ill.	509			1,064	3,032			5,400
57	Erie, Pa.	393	1,140	75		3,826			5,531
58	Savannah, Ga.	793			198	376		172	1,367

TABLE 21.—Showing miscellaneous expenses of school systems in 103 cities of 30,000 population and over, 1909—Continued.

GROUP III.—CITIES HAVING A POPULATION OF 50,000 TO 100,000 IN 1910—Continued.

City.	School census and elections.	Truant officers and police.	Medical inspection and nurses.	Pensions.	Rent.	Insurance.	Transportation of pupils.	Payments to schools and institutions.	Other miscellaneous expenses.	Total.
59 Oklahoma, Okla.....	\$32	\$1,350	\$850	\$3,872	\$468	\$4,588		\$670		\$6,438
60 Harrisburg, Pa.....		570		1,492		526		6		6,488
61 Charleston, S. C.....						1,187		23,069		25,748
62 Portland, Me.....	1,063	873			135	3,881	\$1,741			7,643
63 East St. Louis, Ill.....	1,290	2,074			2,206	1,738				7,308
64 Holyoke, Mass.....	197	2,846	900		890		738	393		5,964
65 Jacksonville, Fla.....					65	538	6,495	358		7,456
66 Brockton, Mass.....	371	715	1,470				100	58		2,714
67 Bayonne, N. J.....		1,000	625		2,619	716				4,960
68 Johnstown, Pa.....		450			75	1,324				1,849
69 Passaic, N. J.....		800	800	838	600	901		572		4,511
70 Wichita, Kans.....		450				368		420		1,606
71 Covington, Ky.....	547	1,474			2,532	378				4,931
72 Allentown, Pa.....		900				1,316				2,216
73 Springfield, Ill.....		780			660	519				1,959
74 Saginaw, Mich.....	402					2,030		1,000		3,432
75 Canton, Ohio.....	370	480				765				1,615

GROUP IV.—CITIES HAVING A POPULATION OF 30,000 TO 50,000 IN 1910.

76 Sioux City, Iowa.....		\$600			\$432	\$3,385	\$1,448	\$800	\$750	\$5,865
77 Lancaster, Pa.....		1,100	\$500			108				3,258
78 Atlantic City, N. J.....		1,890	1,200							3,090
79 Little Rock, Ark.....	\$325					2,785				3,110
80 Rockford, Ill.....	175	400								575
81 Bay City, Mich.....	573	1,272				484				2,329
82 York, Pa.....		405				1,751			1,100	3,256
83 Sacramento, Cal.....	596	1,063			1,270	1,253				4,182
84 Chattanooga, Tenn.....	133				297	268		295	12	935
85 Malden, Mass.....	298	1,000	530					233		2,061

86	Pueblo, Colo.....	810	1,350						1,795	1,858	512	73	4,028
87	Haverhill, Mass.....	138	796	373			1,324		1,875				6,876
88	New Britain, Conn.....	302	700						1,807	402	13,238		19,449
89	Topelka, Kans.....	239	360						2,359				2,058
90	Davenport, Iowa.....	242	600						1,295			9,077	11,214
91	Wheeling, W. Va.....	290	900				1,058		20				2,268
92	Chester, Pa.....		660										2,660
93	Dubuque, Iowa.....	406	360				600		86				1,452
94	Woonsocket, R. I.....	329		150			104		285				2,430
95	Radnie, Wis.....	165											165
96	Knoxville, Tenn.....			300			276		1,007		43		1,626
97	New Castle, Pa.....		405				139		2,131				2,675
98	Joliet, Ill.....	189	396				529		553				1,667
99	Atuburn, Mass.....	427	500	86			700		564			1,419	3,696
100	Taunton, Mass.....	240	750	800					656	1,410	334		4,190
101	Oskosh, Wis.....	152	585						1,813				2,550
102	Joplin, Mo.....	403	720										1,123
103	Newport, Ky.....	366	1,200				236		412				2,214

TABLE 22.—Showing expenses of instruction, operation, and maintenance of kindergartens in 103 cities of 30,000 population and over, 1909.

	Salaries of teachers.	Salaries and expenses of supervisors.	Text-books, stationery, and general school supplies.	Other current expenses.	Total.
Grand total.....	\$1,205,978	\$18,271	\$39,549	\$30,543	\$1,294,341
Group I.....	771,872	11,717	25,551	12,092	\$21,232
Group II.....	208,850	2,904	5,443	6,800	223,997
Group III.....	170,142	2,800	7,036	11,019	190,997
Group IV.....	55,114	850	1,519	632	58,115

GROUP I.—CITIES HAVING A POPULATION OF 300,000 AND OVER IN 1910.

1	Chicago, Ill.....	\$198,403		\$6,117	\$5,253	\$209,773
2	St. Louis, Mo.....	152,358	\$5,762	3,937	744	162,801
3	Cleveland, Ohio.....	53,009	1,500	2,111	2,892	59,512
4	Baltimore, Md.....					
5	Detroit, Mich.....	96,835		3,906		100,741
6	Buffalo, N. Y.....	23,470	1,200	958	1,556	27,184
7	San Francisco, Cal.....					
8	Milwaukee, Wis.....	63,650				63,650
9	Newark, N. J.....					
10	New Orleans, La.....	38,500		3,200		41,700
11	Washington, D. C.....	71,230	3,255	2,620	1,502	78,607
12	Los Angeles, Cal.....	66,927		2,682	110	69,719
13	Minneapolis, Minn.....	7,490		20	35	7,545

GROUP II.—CITIES HAVING A POPULATION OF 100,000 TO 300,000 IN 1910.

14	Jersey City, N. J.....					
15	Providence, R. I.....	\$28,945	\$904			\$29,849
16	St. Paul, Minn.....					
17	Portland, Ore.....					
18	Columbus, Ohio.....					
19	Toledo, Ohio.....	37,003		\$895	\$2,755	40,653
20	Oakland, Cal.....	4,560		150		4,710
21	Syracuse, N. Y.....	18,000				18,000
22	New Haven, Conn.....	19,400	1,100	643	3,719	24,862
23	Birmingham, Ala.....					
24	Memphis, Tenn.....					
25	Scranton, Pa.....	14,915		2,000		16,915
26	Paterson, N. J.....					
27	Omaha, Nebr.....	36,438		1,033		37,471
28	Grand Rapids, Mich.....					
29	Nashville, Tenn.....					
30	Lowell, Mass.....	12,930		546		13,476
31	Cambridge, Mass.....	17,809		176	326	18,311
32	Spokane, Wash.....					
33	Albany, N. Y.....	18,850	900			19,750

GROUP III.—CITIES HAVING A POPULATION OF 50,000 TO 100,000 IN 1910.

34	Hartford, Conn.....	\$29,718	\$700	\$1,811		\$32,229
35	Trenton, N. J.....					
36	New Bedford, Mass.....					
37	Reading, Pa.....					
38	Camden, N. J.....	4,000		399		4,399
39	Dallas, Tex.....					
40	Springfield, Mass.....	15,090	300	418	\$643	16,451
41	Wilmington, Del.....					
42	Des Moines, Iowa.....	24,368	1,800	894	5,674	32,736
43	Lawrence, Mass.....					
44	Tacoma, Wash.....					
45	Kansas City, Kans.....	450		73		523

TABLE 22.—Showing expenses of instruction, operation, and maintenance of kindergartens in 103 cities of 30,000 population and over, 1909—Continued.

GROUP III.—CITIES HAVING A POPULATION OF 50,000 TO 100,000 IN 1910—Continued.

		Salaries of teachers.	Salaries and expenses of supervisors.	Text-books, stationery, and general school supplies.	Other current expenses.	Total.
46	St. Joseph, Mo.....					
47	Troy, N. Y.....	\$12,653		\$762		\$13,415
48	Utica, N. Y.....	12,613			\$750	13,363
49	Elizabeth, N. J.....					
50	Schenectady, N. Y.....	6,564		547		7,111
51	Hoboken, N. J.....	15,568		650		16,218
52	Manchester, N. H.....	1,909		169	14	2,092
53	Evansville, Ind.....	7,350		104	24	7,478
54	Norfolk, Va.....					
55	Wilkes-Barre, Pa.....					
56	Peoria, Ill.....	6,829		78		6,907
57	Erie, Pa.....	1,790		143	142	2,075
58	Savannah, Ga.....					
59	Oklahoma, Okla.....	4,185				4,185
60	Harrisburg, Pa.....					
61	Charleston, S. C.....					
62	Portland, Me.....	3,675		319	3,532	7,526
63	East St. Louis, Ill.....					
64	Holyoke, Mass.....	9,136		198		9,334
65	Jacksonville, Fla.....					
66	Brookton, Mass.....					
67	Bayonne, N. J.....	6,720		471		7,191
68	Johnstown, Pa.....					
69	Passaic, N. J.....					
70	Wichita, Kans.....					
71	Covington, Ky.....	6,954			240	7,194
72	Allentown, Pa.....					
73	Springfield, Ill.....					
74	Saginaw, Mich.....					
75	Canton, Ohio.....	570				570

GROUP IV.—CITIES HAVING A POPULATION OF 30,000 TO 50,000 IN 1910.

76	Sioux City, Iowa.....					
77	Lancaster, Pa.....					
78	Atlantic City, N. J.....					
79	Little Rock, Ark.....					
80	Rockford, Ill.....					
81	Bay City, Mich.....					
82	York, Pa.....					
83	Sacramento, Cal.....	\$10,440		\$107	\$120	\$10,667
84	Chattanooga, Tenn.....					
85	Malden, Mass.....					
86	Pueblo, Colo.....	7,963		253		8,216
87	Haverhill, Mass.....	3,355				3,355
88	New Britain, Conn.....	5,574		222		5,796
89	Topeka, Kans.....	1,080			45	1,125
90	Davenport, Iowa.....					
91	Wheeling, W. Va.....					
92	Chester, Pa.....					
93	Dubuque, Iowa.....	4,550	\$850	143		5,543
94	Woonsocket, R. I.....	2,372		220	466	3,058
95	Racine, Wis.....	7,680		272		7,952
96	Knoxville, Tenn.....					
97	New Castle, Pa.....					
98	Joliet, Ill.....					
99	Anburn, N. Y.....	3,225			1	3,226
100	Taunton, Mass.....					
101	Oshkosh, Wis.....	8,875		302		9,177
102	Joplin, Mo.....					
103	Newport, Ky.....					

TABLE 23.—Showing for each item of expense of general control the percentage of total expenses, based on Table 16.

Cities.	Board of education.		Finance offices.		Superintendent's office.		Other overhead expenses.		Total.	
	Percentage.	Rank.	Percentage.	Rank.	Percentage.	Rank.	Percentage.	Rank.	Percentage.	Rank.
Group I: Median.....	0.69	6	0.40	3	0.90	7	0.42	4	2.56	7
Middle, 50 per cents... { .345 to { 1.30	4 to 8				{ .67 to { 1.80	3 to 8			{ 1.80 to { 3.69	4 to 10
Group II: Median.....	.76	5+	.66	5	1.295	10+	.50	7+	2.415	10+
Middle, 50 per cents... { .485 to { .855	4 to 6		{ .13 to { 1.12	3 to 7	{ .87 to { 1.97	6 to 13	{ .27 to { .575	5 to 9	{ 1.88 to { 3.30	5 to 14
Group III: Median.....	1.325	12+	.70	9+	1.78	21	.54	11	3.28	19+
Middle, 50 per cents... { .84 to { 1.59	7 to 17		{ .23 to { 1.40	5 to 14	{ 1.50 to { 2.50	10 to 29	{ .12 to { .92	5 to 18	{ 2.62 to { 4.45	10 to 29
Group IV: Median.....	.71	9	1.11	6	2.47	13+	.51	9	3.78	14+
Middle, 50 per cents... { .25 to { 1.27	5 to 13		{ .36 to { 1.90	3 to 9	{ 2.01 to { 3.07	7 to 20	{ .17 to { .735	5 to 13	{ 2.99 to { 5.00	8 to 21

GROUP I.—CITIES HAVING A POPULATION OF 300,000 OR OVER IN 1910.

1 Chicago, Ill.....	0.96	7	2.11	5	0.39	2	0.34	3	3.80	11
2 St. Louis, Mo.....	6.93	11	.28	1	.26	1	.80	5	8.27	13
3 Cleveland, Ohio.....	.29	2	.34	2	2.70	11	4.70	7	8.03	12
4 Baltimore, Md.....	1.13	8			.84	5	.20	1	2.17	5
5 Detroit, Mich.....					1.80	9			1.80	4
6 Buffalo, N. Y.....	.32	3			.83	4			1.15	2
7 San Francisco, Cal.....	.69	6			1.77	8			2.46	6
8 Milwaukee, Wis.....	1.47	9			1.80	9	.42	4	3.69	10
9 Newark, N. J.....	1.84	10			1.10	7			2.94	9
10 New Orleans, La.....			.40	3	2.16	10			2.56	7
11 Washington, D. C.....	.65	5			.67	3	.22	2	1.54	3
12 Los Angeles, Cal.....	.37	4	1.10	4	.90	6	1.30	6	2.67	8
13 Minneapolis, Minn.....	.23	1			.67	3			.90	1

GROUP II.—CITIES HAVING A POPULATION OF 100,000 TO 300,000 IN 1910.

14 Jersey City, N. J.....	0.33	2			0.95	8	0.54	9	1.82	3
15 Providence, R. I.....					2.65	16	.61	10	3.26	13
16 St. Paul, Minn.....	.79	6			.94	7			1.73	2
17 Portland, Oreg.....			0.66	5	1.34	11			2.00	7
18 Columbus, Ohio.....			.89	6	.79	4	1.90	12	3.58	16
19 Toledo, Ohio.....	.58	4	.12	2	.53	1	1.96	13	3.19	12
20 Oakland, Cal.....					1.87	12	.01	1	1.88	5
21 Syracuse, N. Y.....	.79	6			.82	5	.26	4	1.87	4
22 New Haven, Conn.....	1.40	8	.13	3	.87	6	.16	3	2.56	11
23 Birmingham, Ala.....					4.00	18			4.00	17
24 Memphis, Tenn.....	.09	1	1.12	7	1.87	12	.48	7	3.56	15
25 Scranton, Pa.....			2.45	9	2.99	17	.30	6	5.74	18
26 Paterson, N. J.....	.92	7			.70	3			1.62	1
27 Omaha, Nebr.....	2.38	9	.27	4	1.25	10	.10	2	4.00	17
28 Grand Rapids, Mich.....	.39	3	.02	1	2.37	15	.52	8	3.30	14
29 Nashville, Tenn.....	.73	5			1.10	9	.52	8	2.35	9
30 Lowell, Mass.....					1.34	11	.28	5	1.62	1
31 Cambridge, Mass.....					2.24	14			2.24	8
32 Spokane, Wash.....			1.17	8	.65	2	.66	11	2.48	10
33 Albany, N. Y.....					1.97	13			1.97	6

GROUP III.—CITIES HAVING A POPULATION OF 50,000 TO 100,000 IN 1910.

34 Hartford, Conn.....	0.94	10	0.35	7	0.60	1	0.21	7	2.10	4
35 Trenton, N. J.....	.65	5			1.35	7			2.00	3
36 New Bedford, Mass.....					3.18	33			3.18	17
37 Reading, Pa.....			.60	9	2.80	30			3.40	21
38 Camden, N. J.....					2.00	22			2.00	3
39 Dallas, Tex.....	1.59	17			1.56	12	.10	4	3.25	19
40 Springfield, Mass.....					2.33	27	.59	12	2.92	14

TABLE 23.—Showing for each item of expense of general control the percentage of total expenses, based on Table 16—Continued.

GROUP III.—CITIES HAVING A POPULATION OF 50,000 TO 100,000 IN 1910—Continued.

Cities.	Board of education.		Finance offices.		Superintendent's office.		Other overhead expenses.		Total.	
	Percentage.	Rank.	Percentage.	Rank.	Percentage.	Rank.	Percentage.	Rank.	Percentage.	Rank.
41 Wilmington, Del.					3.49	35	.05	1	3.54	22
42 Des Moines, Iowa	.87	8	.18	3	1.06	2	.66	13	2.77	12
43 Lawrence, Mass.					1.65	13	.25	8	1.90	2
44 Tacoma, Wash.			1.23	13	1.17	23	1.15	22	4.55	31
45 Kansas City, Kans.	3.68	23			2.68	14	.90	16	6.26	37
46 St. Joseph, Mo.	2.35	20	.23	5	1.46	9	.54	11	4.58	32
47 Troy, N. Y.	.84	7	.04	1	1.50	10	.12	5	2.50	7
48 Utica, N. Y.					1.79	20	1.93	24	3.72	23
49 Elizabeth, N. J.	1.25	12			1.72	16			2.97	15
50 Schenectady, N. Y.	.57	4			1.53	11	.25	8	2.35	5
51 Hoboken, N. J.	3.03	22			1.29	6	.08	3	4.40	28
52 Manchester, N. H.	.23	2			2.28	26			2.51	8
53 Evansville, Ind.	.69	6	.34	6	1.76	17	.05	1	2.84	13
54 Norfolk, Va.	.88	9	.16	2	1.12	5	.94	19	3.10	16
55 Wilkes-Barre, Pa.			2.91	16	2.80	30	.12	5	5.83	36
56 Peoria, Ill.	1.40	13	.22	4	1.10	4	2.93	25	5.65	35
57 Erie, Pa.	2.77	21	4.22	18	1.93	21	.05	1	8.97	40
58 Savannah, Ga.					3.62	36	.91	17	4.53	30
59 Oklahoma, Okla.			1.05	11	1.65	13			2.70	10
60 Harrisburg, Pa.	1.62	18	.80	10	1.12	5	1.01	21	4.45	29
61 Charleston, S. C.					2.50	29			2.50	7
62 Portland, Me.					1.37	8	.46	9	1.83	1
63 East St. Louis, Ill.	1.86	19	1.40	14			.79	15	4.05	25
64 Holyoke, Mass.					2.24	25	.51	10	2.75	11
65 Jacksonville, Fla.	.38	3	2.42	15	4.00	37			6.80	38
66 Brockton, Mass.					2.39	28			2.39	6
67 Bayonne, N. J.	1.45	14			1.09	3	1.00	20	2.54	9
68 Johnstown, Pa.			1.40	14	2.90	31			4.30	27
69 Passaic, N. J.	1.51	15			1.69	15			3.20	18
70 Wichita, Kans.	.99	11	.22	4	1.77	18	.92	18	3.90	24
71 Covington, Ky.	1.57	16			1.78	19	1.63	23	4.98	34
72 Allentown, Pa.			4.04	17	3.06	32	.20	6	7.30	39
73 Springfield, Ill.					3.25	34	.06	2	3.31	20
74 Saginaw, Mich.	.19	1	1.17	12	2.80	30	.67	14	4.83	33
75 Canton, Ohio.	1.51	15	.46	8	2.20	24			4.17	26

GROUP IV.—CITIES HAVING A POPULATION OF 30,000 TO 50,000 IN 1910.

76 Sioux City, Iowa					3.25	23			3.25	11
77 Lancaster, Pa.			1.11	6	2.51	14	0.14	4	3.76	14
78 Atlantic City, N. J.			.64	4	1.81	4			2.45	5
79 Little Rock, Ark.			5.25	12	3.18	22	.73	13	9.16	28
80 Rockford, Ill.	0.65	8			1.70	3			2.35	3
81 Bay City, Mich.	.29	6	.14	2	2.10	8	1.17	17	3.70	13
82 York, Pa.			1.67	8	3.63	25	.82	15	6.12	26
83 Sacramento, Cal.					1.95	6			1.95	1
84 Chattanooga, Tenn.	1.55	15			2.95	18	.08	3	4.58	19
85 Malden, Mass.					2.43	13			2.43	4
86 Pueblo, Colo.	1.13	11	.98	5	3.07	20			5.18	22
87 Haverhill, Mass.					1.67	2	1.27	18	2.94	7
88 New Britain, Conn.	.02	2			3.16	21	.62	10	3.80	15
89 Topeka, Kans.	.71	9	.14	2	1.70	3			2.55	6
90 Davenport, Iowa	.79	10	.04	1	1.22	1	.97	16	3.02	9
91 Wheeling, W. Va.	1.15	12	1.90	9	2.15	9			5.20	23
92 Chester, Pa.	.04	3	3.02	11	2.24	11	.70	12	6.00	25
93 Dubuque, Iowa	1.27	13	.36	3	2.31	12	.03	1	3.97	16
94 Woonsocket, R. I.					3.00	19	.51	9	3.51	12
95 Racine, Wis.	.64	7			1.92	5	.47	8	3.03	10
96 Knoxville, Tenn.					4.41	27			4.41	18
97 New Castle, Pa.	.06	4	2.11	10	2.19	10	.04	2	4.40	17
98 Joliet, Ill.	2.22	17			3.84	26	.66	11	6.72	27
99 Auburn, N. Y.	1.51	14			3.51	24	.33	7	5.35	24
100 Taunton, Mass.					2.01	7	.04	2	2.05	2
101 Oshkosh, Wis.	.01	1			2.75	17	.23	6	2.99	8
102 Joplin, Mo.	.25	5	1.38	7	2.53	15	.74	14	4.90	20
103 Newport, Ky.	2.11	16			2.69	16	.20	5	5.00	21

TABLE 24.—Showing for each item of expense of instruction, operation, and maintenance of elementary schools, including kindergartens, the percentage of total expenses; based on Table 17.

Cities.	Salaries of teachers.		Salaries and expenses of supervisors.		Text-books, stationery, and general school supplies.		Janitors, engineers, and firemen.		Fuel.		Water.		Light and power.		Janitors' supplies and sundry expenses.		Apparatus and manual training equipment.		School libraries.		Repairs and replacements of equipment.		Repairs to buildings.		Total.	
	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.
Group I: Median.....	57.99	6	0.92	6	2.78	7	4.56	7	2.48	7	0.495	3+	0.33	5+	1.10	7	0.25	5	0.16	3	0.89	6	4.745	6+	77.51	7
Middle 50 per cents.....	{53.74 to 58.61	4 to 9	{.795 to 1.985	4 to 8	{1.04 to 3.57	4 to 10	{4.16 to 6.02	4 to 10	{1.17 to 2.69	4 to 10	{.16 to .46	4 to 7	{.52 to 2.21	4 to 9	{.17 to .505	4 to 6	{.295 to 2.37	4 to 8	{.08 to .22	4 to 6	{3.46 to 6.79	4 to 9	{4.745 to 7.751	4 to 10	{75.21 to 78.44	4 to 10
Group II: Median.....	55.45	10+	1.09	8	2.39	10+	5.12	10+	3.035	9+	.32	4	.18	7	.62	8+	.925	6+	.08	4	.59	7+	4.065	10+	76.995	10+
Middle 50 per cents.....	{52.13 to 62.00	6 to 15	{.64 to 4.26	5 to 11	{1.77 to 3.04	6 to 15	{4.75 to 6.33	6 to 14	{1.95 to 3.92	6 to 14	{.29 to .50	3 to 5	{.13 to .31	4 to 10	{.49 to 1.01	5 to 13	{.57 to 1.43	4 to 9	{.22 to .43	5 to 11	{.50 to .86	5 to 10	{2.57 to 6.20	6 to 15	{71.80 to 79.00	6 to 15
Group III: Median.....	53.825	21+	1.73	15+	3.30	18+	5.39	20+	2.89	20	.38	7+	.295	16+	.925	20+	.43	11	.22	5	.68	17	4.30	20	76.90	21+
Middle 50 per cents.....	{50.63 to 58.25	12 to 30	{1.24 to 3.49	8 to 23	{2.04 to 4.01	9 to 28	{4.795 to 6.37	12 to 30	{2.09 to 3.71	11 to 30	{.215 to .465	5 to 10	{.155 to .475	9 to 21	{.56 to 1.57	10 to 30	{.26 to .60	6 to 14	{.05 to .47	3 to 7	{.37 to 1.28	3 to 23	{3.07 to 5.77	11 to 29	{73.775 to 78.81	12 to 30
Group IV: Median.....	54.19	14+	2.275	11+	1.99	13+	6.045	14+	3.39	14	.32	8	.20	11	.88	14	.785	6+	.16	5	.77	10	5.05	13	75.14	14+
Middle 50 per cents.....	{48.90 to 55.52	8 to 21	{1.14 to 3.06	4 to 17	{1.19 to 3.51	8 to 20	{5.26 to 6.69	8 to 21	{2.055 to 4.425	8 to 20	{.20 to .40	4 to 9	{.10 to .40	6 to 16	{.515 to 1.57	8 to 20	{.59 to 1.03	4 to 9	{.08 to .33	2 to 6	{.425 to 1.75	3 to 14	{3.34 to 6.14	8 to 17	{73.13 to 79.24	8 to 21

GROUP I.—CITIES HAVING A POPULATION OF 300,000 AND OVER IN 1910.

1	Chicago, Ill.....	57.99	7	0.23	2	1.44	5	7.00	12	2.69	10	.....	0.16	4	0.41	3	0.25	5	0.16	3	0.07	1	7.15	10	77.55	8	
2	St. Louis, Mo.....	53.74	4	1.43	8	2.78	7	4.08	3	1.17	4	0.19	2	.50	8	.99	6	.12	1	.05	1	.25	2	2.80	2	68.20	1
3	Cleveland, Ohio.....	46.79	1	4.57	10	.71	2	6.02	10	2.48	7	.50	8	3.72	10	.13	2	.30	4	.49	5	2.80	4	4.29	5	69.51	2
4	Baltimore, Md.....	58.50	9	.17	1	3.57	10	3.54	1	3.04	12	.46	7	.01	1	.15	3	.56	5	.....	.....	.56	5	6.44	10	78.44	10
5	Detroit, Mich.....	58.37	8	.79	3	2.59	6	6.48	11	2.26	6	.02	2	1.10	7	1.10	7	2.11	10	.....	.....	2.29	1	2.29	1	76.01	5

GROUP II.—CITIES HAVING A POPULATION OF 100,000 TO 300,000 IN 1910.

6	Buffalo, N. Y.	51.37	3	7.13	11	3.17	9	4.89	8	2.08	9	.84	5	.62	9	2.38	10	.69	9	.27	5	2.02	8	4.79	7	80.85
7	San Francisco, Cal.	61.04	12	.....	.....	.....	1	7.80	13	.51	1	.72	4	.09	3	2.21	9	.19	4	.....	1.05	7	3.46	4	77.51
8	Milwaukee, Wis.	58.61	10	.80	4	1.04	4	4.40	6	3.01	11	.88	6	.08	3	2.24	2	.08	3	.....	1.05	7	6.79	9	76.99
9	Newark, N. J.	57.75	6	1.29	7	3.05	8	4.56	7	1.75	5	.27	3	.28	5	5.52	4	.37	6	.....	3.23	10	4.70	6	77.77
10	New Orleans, La.	57.74	5	.88	5	4.55	12	4.16	4	.76	2	.....	.....	.01	1	5.66	12	.....	.....	.....	2.72	9	7.72	11	84.20
11	Washington, D. C.	50.58	2	2.54	9	3.61	1	4.27	5	3.23	13	.....	.....	.28	5	.81	5	.53	7	.....	.....	3	8.44	12	74.58
12	Los Angeles, Cal.	63.67	13	.....	.....	.....	3	3.95	2	.94	3	.01	1	.46	7	1.10	7	.19	4	.....	.....	2	5.9	6	75.21
13	Minneapolis, Minn.	60.29	11	.92	6	5.54	13	5.52	9	2.65	8	1.48	8	3.27	11	79.67

14	Jersey City, N. J.	66.38	20	1.01	6	3.04	15	4.79	7	3.03	9	.....	.....	0.19	8	0.53	7	1.62	11	0.02	2	0.57	6	4.60	12	85.78
15	Providence, R. I.	49.93	3	1.05	7	2.40	11	5.29	11	4.19	16	0.50	6	.13	4	.29	1	.....	.....	.....	.....	.62	9	7.40	16	71.80
16	St. Paul, Minn.	58.46	13	1.09	8	.27	1	10.88	19	2.95	8	.50	6	.34	11	1.88	16	.....	.....	.....	.....	.....	2.87	7	78.90	
17	Portland, Ore.	62.40	16	1.08	6	4.30	10	6.20	13	1.53	2	.36	5	.09	6	.60	8	1.56	10	.01	1	.....	6.20	15	78.62	
18	Columbus, Ohio.	43.20	1	9.63	15	2.38	10	2.38	13	2.03	7	.....	.....	.34	11	.53	7	1.72	12	.....	.....	1.31	12	2.14	3	69.73
19	Toledo, Ohio.	62.00	15	.37	4	3.16	16	3.95	1	3.60	13	.....	.....	.09	3	3.40	18	1.10	8	.....	.....	1.01	11	1.48	2	80.16
20	Oakland, Cal.	62.86	18	.....	.....	.....	9	4.34	4	.80	1	.29	3	.18	7	.64	9	.89	6	.52	7	1.59	13	4.95	13	79.00
21	Syracuse, N. Y.	53.17	9	.20	2	2.54	12	4.83	8	5.25	18	.....	.....	.49	13	1.37	14	.57	4	.....	.....	3.44	9	71.86		
22	New Haven, Conn.	54.08	10	5.70	12	2.74	16	6.59	15	3.90	13	.....	.....	.31	10	1.59	11	.11	2	.....	.....	.17	2	1.15	11	77.35
23	Birmingham, Ala.	52.70	8	7.77	14	.47	12	4.23	12	1.95	6	.32	4	.03	2	.82	11	.72	.....	.....	.07	1	3.00	8	71.36	
24	Memphis, Tenn.	64.25	19	2.82	11	3.27	17	6.99	17	1.90	5	.50	0	.16	6	.84	12	.....	.....	.....	.....	2.40	14	2.37	5	85.30
25	Scranton, Pa.	52.13	6	.....	.....	.....	5	6.90	16	3.55	12	.92	7	.09	3	.36	2	.....	.....	.....	.....	.....	2.25	4	71.64	
26	Peterson, N. J.	61.46	14	.19	1	1.48	4	4.51	5	1.64	4	.21	1	.02	1	.39	3	.....	.....	.....	.....	.71	10	10.85	20	81.46
27	Omaha, Nebr.	56.22	11	.....	.....	.....	13	6.33	14	3.47	11	.....	.....	.13	4	.78	10	.96	7	.....	.....	.27	3	5.93	14	76.64
28	Grand Rapids, Mich.	50.14	5	6.88	13	2.17	9	4.93	9	1.95	6	.21	1	.51	14	.36	2	.87	5	.....	.....	.45	4	7.68	17	76.15
29	Nashville, Tenn.	62.60	17	1.94	10	1.63	5	1.29	3	3.24	2	.....	.....	.24	1	1.01	13	.....	.....	.07	3	.58	7	10.26	19	84.37
30	Lowell, Mass.	50.01	4	.....	.....	.....	8	8.86	18	3.92	14	.29	3	.43	12	.49	5	.....	.....	.....	.....	.....	.....	8.61	18	74.76
31	Cambridge, Mass.	49.59	2	.23	3	1.25	3	6.23	12	4.19	16	.....	.....	.19	8	.44	4	1.43	9	.....	.....	.55	5	4.13	11	68.23
32	Spokane, Wash.	52.54	7	.91	5	4.62	19	5.29	11	3.04	10	.....	.....	.14	5	2.76	17	.15	3	.....	.....	.08	4	2.57	10	72.10
33	Albany, N. Y.	57.71	12	1.30	9	3.85	18	4.95	10	4.63	17	.....	.....	.28	9	.50	6	.03	1	.....	.....	.60	8	4.00	10	77.98

GROUP III.—CITIES HAVING A POPULATION OF 50,000 TO 100,000 IN 1910.

34	Hartford, Conn.	53.13	20	5.85	26	4.29	31	5.11	18	3.16	25	0.43	9	0.62	25	2.88	38	.....	.....	.....	.....	0.33	6	0.54	14	74.35
35	Trenton, N. J.	59.10	34	1.24	8	3.44	23	4.64	9	2.87	18	.....	.....	.18	11	2.10	36	.....	.....	.....	.....	.04	2	.42	11	76.07
36	New Bedford, Mass.	51.83	15	2.32	18	4.20	30	6.29	29	4.21	34	.....	.....	.05	8	1.12	24	0.43	11	.....	.....	.31	8	5.44	27	76.30
37	Reading, Pa.	56.70	27	.56	2	3.74	27	8.41	39	3.71	30	.....	.....	.13	3	.88	19	.29	8	.....	.....	1.06	22	2.52	6	77.90
38	Camden, N. J.	61.95	38	1.1	5.12	33	3.04	35	2.93	22	.08	1	1.10	7	.56	11	.08	16	1.92	27	3.61	13	84.10
39	Dallas, Tex.	51.67	14	11.62	31	.96	3	4.24	7	1.74	6	.....	.....	.70	27	.24	3	.....	.....	.....	.....	.....	.....	1.93	28	72.40
40	Springfield, Mass.	45.61	4	3.76	25	3.43	22	5.37	19	4.79	37	.....	.....	.70	27	1.31	27	.88	17	.....	.....	.52	15	2.73	8	69.10

TABLE 24.—Showing for each item of expense of instruction, operation, and maintenance of elementary schools, including kindergartens, the percentage of total expenses, based on Table 17—Continued.

Cities.	Salaries of teachers.		Salaries and expenses of supervisors.		Text-books, stationery, and general school supplies.		Janitors, engineers, and firemen.		Fuel.		Water.		Light and power.		Janitors' supplies and sundry expenses.		Apparatus and manual training equipment.		School libraries.		Repairs and replacements of equipment.		Repairs to buildings.		Total.	
	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.
41 Wilmington, Del.	60.20	35	1.39	11	3.27	18	4.76	11	3.85	31	0.41	8	0.17	10	0.57	12	0.45	12	5.77	29	78.87	31	
42 Des Moines, Iowa	52.18	16	2.75	21	2.81	15	6.00	27	2.81	17	.....	.....	.....	.....	0.48	9	0.56	14	.....	.....	4.73	22	74.54	15
43 Lawrence, Mass.	54.00	24	6.40	27	2.88	16	5.96	26	4.61	36	.....	.....	.....	.....	1.05	31	.....	.....	.....	.....	4.65	21	77.20	26
44 Tacoma, Wash.	50.36	11	53.90	23	3.18	17	4.91	13	2.21	14	.....	.....	.....	.....	1.21	26	0.03	2	.....	.....	0.96	21	71.00	7
45 Kansas City, Kans.	53.90	23	.....	.....	1.56	7	5.09	17	2.89	20	.....	.....	.....	.....	0.62	13	0.26	6	.....	.....	3.67	14	68.70	4
46 St. Joseph, Mo.	57.36	29	.....	.....	1.25	4	9.66	40	3.37	26	.....	.....	.....	.....	0.05	1	0.44	11	.....	.....	2.95	10	77.17	25
47 Troy, N. Y.	46.80	5	.....	.....	2.04	17	5.40	21	4.60	35	.....	.....	.....	.....	0.94	21	0.02	1	.....	.....	9.71	35	74.31	13
48 Utica, N. Y.	58.30	31	.....	.....	1.85	8	6.50	32	5.25	38	.....	.....	.....	.....	1.67	32	0.05	3	.....	.....	2.53	7	77.13	23
49 Elizabeth, N. J.	53.90	23	.....	.....	2.97	9	5.89	35	5.38	15	.....	.....	.....	.....	0.84	30	0.52	10	.....	.....	3.25	32	75.60	17
50 Schenectady, N. Y.	58.65	32	.....	.....	2.04	9	3.76	4	3.96	32	.....	.....	.....	.....	0.77	28	0.45	8	.....	.....	5.77	29	79.05	32
51 Hoboken, N. J.	60.35	36	.....	.....	3.56	25	4.08	6	1.62	4	.....	.....	.....	.....	1.00	23	0.23	9	.....	.....	37	9	8.23	33
52 Manchester, N. H.	58.90	33	.....	.....	2.62	13	3.97	5	6.62	40	.....	.....	.....	.....	0.82	18	0.38	9	.....	.....	7.9	19	4.30	34
53 Evansville, Ind.	50.00	12	.....	.....	1.51	6	6.43	31	2.21	14	.....	.....	.....	.....	1.70	33	.....	.....	.....	.....	5.12	25	76.70	21
54 Norfolk, Va.	67.08	40	.....	.....	1.50	5	8.06	38	3.98	9	.....	.....	.....	.....	0.33	18	0.75	10	.....	.....	1.10	23	85.00	40
55 Wilkes-Barre, Pa.	55.30	26	.....	.....	6.40	37	5.69	25	3.45	28	.....	.....	.....	.....	0.24	13	0.69	15	.....	.....	6.77	33	79.76	35
56 Peoria, Ill.	63.61	39	.....	.....	1.25	4	5.58	24	2.07	10	.....	.....	.....	.....	0.26	14	0.14	2	.....	.....	1.46	19	81.05	38
57 Erie, Pa.	45.40	7	.....	.....	3.72	26	6.31	30	3.49	29	.....	.....	.....	.....	0.69	26	0.43	7	.....	.....	0.41	10	2.08	5
58 Savannah, Ga.	72.29	41	.....	.....	3.26	20	3.26	3	1.27	2	.....	.....	.....	.....	0.42	7	.....	.....	.....	.....	0.09	4	78.75	30
59 Oklahoma, Okla.	53.80	21	.....	.....	2.65	20	4.69	10	1.68	5	.....	.....	.....	.....	0.33	19	0.38	31	.....	.....	3.08	31	4.87	23
60 Harrisburg, Pa.	48.19	7	.....	.....	6.65	38	6.92	34	2.88	19	.....	.....	.....	.....	0.35	19	0.29	5	.....	.....	2.24	30	3.91	17
61 Charleston, S. C.	45.51	3	.....	.....	2.26	2	1.28	1	1.09	1	.....	.....	.....	.....	0.41	20	0.13	13	.....	.....	0.09	4	4.24	19
62 Portland, Me.	52.70	19	.....	.....	3.46	24	7.25	36	4.09	33	.....	.....	.....	.....	0.41	20	0.50	13	.....	.....	0.43	12	5.49	28
63 East St. Louis, Ill.	47.10	6	.....	.....	3.35	12	10.40	41	1.78	8	.....	.....	.....	.....	0.16	9	0.77	17	.....	.....	3.60	12	80.23	37
64 Holyoke, Mass.	50.23	10	.....	.....	1.41	13	3.36	21	4.40	8	.....	.....	.....	.....	0.52	22	0.99	22	.....	.....	0.74	18	7.87	45
65 Jacksonville, Fla.	52.20	17	.....	.....	.....	.....	2.80	2	0.73	1	.....	.....	.....	.....	1.95	35	0.15	5	.....	.....	2.02	29	5.05	24

GROUP III.—CITIES HAVING A POPULATION OF 50,000 TO 100,000 IN 1910—Continued.

GROUP IV.—CITIES HAVING A POPULATION OF 30,000 TO 50,000 IN 1910.

66	Broekton, Mass.....	49.46	8	1.18	7	4.55	32	5.09	17	5.46	39	.19	3	.27	15	1.35	28	2.71	37	.26	6	1.22	24	3.68	15	71.23	8
67	Bayonne, N. J.....	61.26	37	.82	3	5.14	34	4.92	14	2.09	11	.88	14	.05	5	2.71	37	2.71	37	.26	6	1.22	24	3.68	15	71.23	8
68	Johnstown, Pa.....	49.50	9	1.31	10	3.34	20	6.74	33	2.18	13	.20	4	.60	23	2.71	37	2.71	37	.26	6	1.22	24	3.68	15	71.23	8
69	Passaic, N. J.....	57.15	28	1.40	4	4.02	29	4.98	15	3.14	24	.24	2	.03	5	1.41	29	1.41	29	.03	1	.29	7	5.33	36	77.15	22
70	Wichita, Kans.....	52.50	18	1.24	8	2.05	10	5.43	16	2.11	12	.23	5	.35	19	3.21	39	3.21	39	.35	5	1.28	25	10.40	37	77.87	28
71	Covington, Ky.....	58.20	30	3.73	24	4.12	1	5.43	22	1.30	3	.23	5	.35	19	3.21	39	3.21	39	.35	5	1.28	25	10.40	37	77.87	28
72	Allentown, Pa.....	51.25	13	.95	4	4.01	28	6.14	28	2.96	23	.20	12	.20	12	1.79	34	1.79	34	.20	12	.50	14	10.00	36	77.80	37
73	Springfield, Ill.....	53.85	22	3.49	23	2.73	14	5.87	22	1.75	7	.04	4	.04	4	1.57	30	1.57	30	.04	4	.91	20	6.58	30	75.71	18
74	Saginaw, Mich.....	42.80	1	1.79	16	2.73	14	5.87	22	2.00	21	.48	11	.48	11	.68	14	.68	14	.48	11	.47	13	4.30	30	64.94	3
75	Canton, Ohio.....	54.03	25	1.40	12	6.39	36	7.41	37	2.73	10	.31	1	.31	1	.25	4	.25	4	.31	1	.17	3	2.81	9	75.20	16

76	Stoux City, Iowa.....	58.10	25	0.85	2	2.92	18	6.10	15	2.58	10	.38	8	.14	8	.80	13	.80	13	.14	8	.21	2	5.05	13	77.00	7	
77	Lancaster, Pa.....	48.35	6	1.26	7	3.50	25	5.81	23	3.93	16	.52	11	.25	12	2.67	24	2.67	24	.52	11	.58	9	5.05	13	73.21	9	
78	Alentown, N. J.....	47.44	4	3.53	26	4.32	2	4.98	23	3.99	15	.62	13	.29	14	.88	14	.88	14	.62	13	.77	10	2.83	7	74.30	12	
79	Little Rock, Ark.....	56.40	22	2.56	14	1.98	13	4.06	3	2.56	9	.77	12	.38	15	7.81	11	7.81	11	.38	15	1.67	14	2.32	5	73.48	10	
80	Rockford, Ill.....	48.90	8	2.99	15	.39	1	6.09	21	4.26	20	.20	11	.20	11	2.37	23	2.37	23	.20	11	1.10	10	6.23	19	73.13	8	
81	Bay City, Mich.....	48.28	5	6.64	21	2.92	18	6.10	15	2.58	10	.38	8	.14	8	.80	13	.80	13	.14	8	.21	2	5.05	13	77.00	7	
82	York, Pa.....	53.10	13	1.26	7	3.50	25	5.81	23	3.93	16	.52	11	.25	12	2.67	24	2.67	24	.52	11	.58	9	5.05	13	73.21	9	
83	Sacramento, Cal.....	59.55	27	1.14	6	1.75	12	5.23	9	1.72	1	.32	7	.08	5	1.51	20	1.51	20	.32	7	.77	10	2.83	7	74.30	12	
84	Chattanooga, Tenn.....	65.10	28	1.38	10	3.90	1	1.99	7	1.99	7	.32	7	.08	5	1.51	20	1.51	20	.32	7	.77	10	2.83	7	74.30	12	
85	Malden, Mass.....	60.85	9	1.03	4	3.36	19	5.26	8	5.09	24	.18	10	.18	10	.24	2	.24	2	.18	10	.30	4	4.07	10	70.38	3	
86	Pueblo, Colo.....	54.38	16	4.20	18	4.20	16	6.30	19	2.12	8	.20	4	.40	16	.60	9	.60	9	.40	16	1.20	13	2.40	6	74.20	11	
87	Haverhill, Mass.....	54.03	14	1.03	4	3.57	21	5.37	13	4.19	19	.16	9	.16	9	.32	4	.32	4	.16	9	.51	7	5.12	14	75.18	15	
88	New Britain, Conn.....	46.02	2	1.38	8	7.05	27	5.19	7	4.86	22	.28	21	1.28	21	.27	3	.27	3	.28	21	.33	6	1.72	3	68.10	1	
89	Topeka, Kans.....	51.53	11	6.22	16	2.68	13	.05	2	4.00	16	.42	6	.88	8	.11	3	.11	3	.42	6	.38	5	4.21	11	74.44	13	
90	Davenport, Iowa.....	39.90	1	9.91	23	.44	2	4.23	4	1.81	5	.02	1	.02	1	.38	5	.38	5	.02	1	3.44	17	10.60	24	71.53	4	
91	Wheeling, W. Va.....	55.52	21	9.62	22	.72	5	4.02	2	2.02	12	.62	19	.62	19	1.32	19	1.32	19	.62	19	.90	11	7.64	23	82.00	27	
92	Chester, Pa.....	55.40	20	4.10	22	7.81	27	.06	3	4.00	18	.06	3	.07	4	14.60	27	14.60	27	.06	3	.28	3	6.46	.21	83.60	28	
93	Dubuque, Iowa.....	53.30	12	4.35	19	.56	3	6.23	20	6.97	26	.51	10	.17	5	.94	15	.94	15	.17	5	.98	12	5.67	15	81.00	26	
94	Woonsocket, R. I.....	52.06	11	2.40	13	4.54	23	6.36	17	4.00	18	.06	3	.07	4	1.10	10	1.10	10	.06	3	.28	3	6.46	.21	83.60	28	
95	Racine, Wis.....	57.74	24	3.06	17	.93	7	5.88	12	2.59	11	.51	10	.51	10	.66	10	.66	10	.51	10	.47	6	1.52	2	75.10	14	
96	Knoxville, Tenn.....	59.10	26	.84	1	8.09	6	7.07	10	1.25	2	.29	6	.04	2	.79	12	.79	12	.04	2	3.58	18	3.85	8	76.40	17	
97	New Castle, Pa.....	54.35	15	2.28	12	5.00	24	1.94	6	1.94	6	.01	1	.54	18	2.01	22	2.01	22	.01	1	.04	1	6.30	29	79.57	22	
98	Joliet, Ill.....	47.41	3	2.17	10	2.35	15	7.82	28	3.60	15	.28	13	.28	13	1.05	16	1.05	16	.28	13	.57	8	4.32	19	69.50	2	
99	Auburn, N. Y.....	54.90	18	2.20	11	1.73	12	5.81	11	4.59	21	.25	5	.18	10	.47	7	.47	7	.25	5	1.03	9	1.32	1	72.65	6	
100	Taunton, Mass.....	54.95	19	1.64	9	2.63	17	5.39	14	6.86	25	.07	4	.07	4	2.79	25	2.79	25	.07	4	2.79	25	4.02	9	79.24	21	
101	Oshkosh, Wis.....	48.75	7	5.84	20	1.19	8	6.29	18	3.73	17	.76	20	.76	20	.56	8	.56	8	.76	20	1.83	15	1.86	4	72.46	5	
102	Joplin, Mo.....	50.90	10	1.04	5	2.00	14	4.50	6	1.74	4	.25	12	.25	12	1.12	18	1.12	18	.25	12	.19	40	19	7.07	22	80.70	16
103	Newport, Ky.....	54.80	17	3.05	16	1.25	9	6.72	22	1.55	3	.75	25	.75	25	1.11	17	1.11	17	.75	25	1.11	17	7.07	22	80.70	16	

TABLE 25.—Showing for each item of expense of instruction, operation, and maintenance of secondary schools the percentage of total expenses; based on Table 18.

Cities.	Salaries of teachers.		Salaries and expenses of supervisors.		Text-books, stationery, and general school supplies.		Janitors, engineers, and firemen.		Fuel.		Water.		Light and power.		Janitors' supplies and sundry expenses.		Apparatus and manual training equipment.		School libraries.		Repairs and replacements of equipment.		Repairs to buildings.		Total.		
	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	
Group I: Median.....	10.46	7	0.37	4+	0.37	6	0.83	7	0.29	7	0.07	2	0.10	5+	6	0.15	6	0.19	5	0.175	2+	0.07	5	0.585	6+	14.21	7
Middle, 50 per cents.....	{ 8.65 to 13.50	{ 4 to 10	{ .32 to .78	{ 3 to 6	{ .33 to .70	{ 4 to 9	{ .09 to 1.02	{ 4 to 10	{ .24 to .41	{ 4 to 9	{ .05 to .13	{ .05 to .13	{ .05 to .13	{ 3 to 7	{ .07 to .34	{ 3 to 9	{ .15 to .33	{ .15 to .33	{ .15 to .33	{ .035 to .195	{ 3 to 7	{ .035 to .195	{ .36 to .78	{ 4 to 9	{ 12.10 to 17.40	{ 4 to 10	
Group II: Median.....	13.23	10	1.116	3+	.74	8+	1.03	9	.52	10	.07	3+	.17	6	.21	8+	.33	7+	.17	5	.085	5+	.535	9+	16.93	10+	
Middle, 50 per cents.....	{ 10.51 to 14.585	{ 6 to 14	{ .125 to 1.00	{ 4 to 11	{ .125 to 1.00	{ 4 to 11	{ .74 to 1.40	{ 5 to 13	{ .395 to .68	{ 6 to 13	{ .05 to .085	{ 3 to 4	{ .05 to .23	{ 3 to 8	{ .11 to .33	{ 5 to 13	{ .13 to 1.015	{ .13 to .25	{ .13 to .25	{ .08 to .25	{ .08 to .25	{ .085 to .175	{ .36 to .665	{ 6 to 13	{ 13.66 to 18.60	{ 6 to 15	
Group III: Median.....	11.37	21+	.89	10+	.925	18+	.86	19	.40	14	.08	6	.09	7	.20	13	.495	10+	.15	5	.165	9+	.64	15+	15.51	21+	
Middle, 50 per cents.....	{ 9.95 to 13.88	{ 12 to 31	{ .33 to 1.24	{ 6 to 15	{ .47 to 1.50	{ 10 to 26	{ .59 to 1.22	{ 9 to 27	{ .21 to .64	{ 6 to 21	{ .045 to .13	{ 6 to 7	{ .06 to .15	{ 5 to 10	{ .085 to .41	{ 5 to 19	{ .35 to .89	{ .35 to .89	{ .35 to .89	{ .08 to .25	{ .08 to .25	{ .06 to .305	{ .5 to .905	{ 8 to 22	{ 13.045 to 18.97	{ 13 to 31	
Group IV: Median.....	12.125	12+	1.005	6+	.51	12	1.11	13	.63	13	.05	4	.13	7	.20	11	.22	6	.10	4	.12	5	.575	9+	16.565	14+	
Middle, 50 per cents.....	{ 10.40 to 14.15	{ 8 to 19	{ .31 to 1.56	{ 4 to 9	{ .28 to .99	{ 7 to 17	{ .83 to 1.37	{ 7 to 19	{ .34 to .835	{ 7 to 18	{ .04 to .08	{ 3 to 5	{ .04 to .31	{ 3 to 13	{ .155 to .43	{ 7 to 15	{ .115 to .58	{ .115 to .58	{ .03 to .27	{ .03 to .27	{ .03 to .27	{ .06 to .30	{ .39 to 1.115	{ 6 to 14	{ 14.23 to 19.03	{ 8 to 21	

GROUP I.—CITIES HAVING A POPULATION OF 300,000 OR OVER IN 1910.

1 Chicago, Ill.....	8.65	4	0.25	2	0.51	7	0.73	5	0.29	7	.07	.07	4	0.07	3	0.15	3	0.15	3	.....	.....	0.01	1	0.80	10	11.30	3
2 St. Louis, Mo.....	10.96	8	1.13	7	.96	10	1.39	12	.36	8	0.01	.08	5	.27	8	.15	3	.15	3	.....	.....	.03	2	.34	3	14.55	8
3 Cleveland, Ohio.....	11.90	9	1.13	7	.19	12	1.05	11	.36	8	.13	.13	7	.11	4	.19	5	.19	5	.....	.....	.08	6	.44	5	15.58	9
4 Baltimore, Md.....	10.40	6	.23	1	1.40	12	.94	9	.26	5	.03	.03	3	.01	1	.18	4	.18	4	.....	.....	.04	3	.70	8	14.21	7
5 Detroit, Mich.....	13.50	10	.67	8	.67	8	1.60	13	.53	10	.01	.01	1	.73	12	.73	12	.73	12	.....	.....	.36	4	.36	4	17.40	10

TABLE 25.—Showing for each item of instruction, operation, and maintenance of secondary schools the percentage of total expenses; based on Table 18—Continued.

GROUP III.—CITIES HAVING A POPULATION OF 50,000 TO 100,000 IN 1910—Continued.

Cities.	Salaries of teachers.		Salaries and expenses of supervisors.		Text-books, stationery, and general school supplies.		Janitors, engineers, and firemen.		Fuel.		Water.		Light and power.		Janitors' supplies and sundry expenses.		Apparatus and manual-training equipment.		School libraries.		Repairs and replacements of equipment.		Repairs to buildings.		Total.	
	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.	Rank.	Percent.
41	12.78	28	1.25	24	.40	14	.95	21	.40	14	.11	9	.26	14	.26	14	.08	12	.08	12	.93	23	.87	30	16.57	24
42	12.34	27	.39	9	.89	27	1.46	30	.89	27	.36	12	.04	2	.04	2	.05	12	.05	12	1.87	30	1.11	1	19.28	33
43	10.10	13	.85	18	.53	18	.45	4	.53	18	.04	3	.36	12	.03	1	.03	1	.17	6	.11	1	.11	1	12.43	9
44	16.02	38	1.00	19	.64	21	1.12	25	.64	21	.05	4	.04	3	.51	22	.03	17	.17	6	.22	4	.22	4	22.50	37
45	17.40	41	.78	16	.73	25	1.98	35	.73	25	.18	9	.48	16	.48	21	1.04	18	.08	3	.61	14	.61	14	24.00	40
46	13.98	32	.42	5	.36	11	1.22	27	.36	11	.41	14	.41	14	.09	7	.29	5	.03	1	.33	8	.33	8	16.96	26
47	10.60	15	.33	6	.50	17	1.08	23	.50	17	.17	11	.17	11	.20	13	.14	2	.45	17	1.29	28	1.48	18	14.84	18
48	10.95	18	.50	11	.19	5	1.49	31	.19	5	.08	6	.08	6	.09	9	.08	6	.01	1	1.07	24	1.07	24	14.46	16
49	9.48	10	1.00	19	.05	4	.31	9	.05	4	.38	13	.38	13	.09	9	.45	10	.15	5	.61	14	.61	14	12.70	10
50	12.00	26	.59	9	.30	17	.59	9	.30	17	.38	13	.38	13	.11	7	.45	10	.15	5	.67	17	.67	17	14.85	19
51	7.50	3	1.07	21	.66	11	2.22	36	.66	11	.02	2	.02	2	.08	4	.39	9	.05	4	.72	19	.72	19	10.70	4
52	10.51	14	1.50	26	.71	24	1.08	19	.71	24	.11	7	.11	7	.19	12	.29	14	.29	14	.48	11	.48	11	14.80	17
53	15.70	36	.77	9	.24	7	1.17	26	.24	7	.01	1	.01	1	.31	16	.21	4	.02	2	.51	12	.51	12	18.94	31
54	9.04	8	.23	6	.13	1	.56	7	.13	1	.02	2	.02	2	.07	3	.36	7	.03	2	.65	16	.65	16	10.05	3
55	10.66	16	.52	12	.14	2	.56	7	.14	2	.06	5	.06	5	.20	13	.36	7	.18	3	.54	18	.54	18	13.17	12
56	8.44	5	.92	11	.33	8	1.58	28	.33	8	.04	3	.04	3	.03	1	.16	3	.03	1	.32	7	.32	7	11.00	6
57	10.00	12	2.09	33	.67	23	1.17	26	.67	23	.06	5	.06	5	.79	25	.09	6	.09	6	.16	2	.16	2	17.53	28
58	11.75	25	1.20	14	.14	2	.65	10	.14	2	.06	5	.06	5	.04	2	.54	11	.04	2	.55	13	.55	13	14.38	15
59	16.03	39	1.33	25	.53	6	1.19	24	.53	6	.19	5	.19	5	.03	1	.89	15	.03	1	.37	16	.37	16	19.00	32
60	14.09	33	1.57	28	.67	23	1.28	28	.67	23	.01	1	.15	10	.03	1	.89	15	.16	9	.88	22	.88	22	19.73	35
61	11.02	19	1.58	29	.62	20	1.03	22	.62	20	.06	5	.06	5	2.01	29	.06	6	.06	6	.72	19	.72	19	14.00	14
62	8.51	6	1.46	4	.44	3	1.79	15	.44	3	.09	7	.09	7	.10	6	.15	8	.15	8	1.19	26	1.19	26	17.48	27
63	11.63	24	.82	5	.08	6	1.74	32	.08	6	.64	17	.64	17	.40	19	.23	12	.04	2	.22	4	.22	4	11.40	7
64	11.63	24	1.05	20	1.46	29	1.46	29	.82	5	.08	6	.08	6	.40	19	.23	12	.04	2	.77	20	.77	20	18.33	30
65	15.50	35	.44	3	.24	7	1.44	33	.24	7	.24	7	.24	7	.64	23	.68	20	.68	20	2.10	31	2.10	31	19.60	34

TABLE 26.—Showing for total amounts expended for instruction, operation, and maintenance of normal, evening, vacation, and special schools the percentage of total expenses; based on Table 19.

Cities.	Normal schools.		Evening schools.		Vacation schools.		Special schools.		Total.	
	Percent- age.	Rank.	Percent- age.	Rank.	Percent- age.	Rank.	Percent- age.	Rank.	Percent- age.	Rank.
Group I: Median.....	1.87	4	1.45	7	0.235	3+	0.665	3+	3.54	7
Middle, 50 per cents.....			{ 1.10 to 1.68	{ 4 to 10	{ .18 to .50	{ 3 to 5			{ 2.67 to 4.86	{ 4 to 10
Group II: Median.....			1.52	9	.27	3+	1.32	1+	1.71	9+
Middle, 50 per cents.....			{ .86 to 2.20	{ 5 to 13					{ .77 to 2.71	{ 5 to 14
Group III: Median.....	1.15	4	.975	15+	.67	2	2.05	1+	1.31	17
Middle, 50 per cents.....			{ .615 to 1.995	{ 9 to 23					{ .665 to 2.315	{ 10 to 25
Group IV: Median.....			1.185	7+			.775	2+	1.685	7+
Middle, 50 per cents.....			{ .57 to 2.13	{ 5 to 10					{ .79 to 2.335	{ 5 to 10

GROUP I.—CITIES HAVING A POPULATION OF 300,000 OR MORE IN 1910.

1	Chicago, Ill.....	1.21	3	1.68	10	0.16	2	0.49	2	3.54	7
2	St. Louis, Mo.....	2.05	5	1.10	4	.18	3	1.60	5	4.93	11
3	Cleveland, Ohio.....	2.52	7	1.12	5	.50	5	.42	1	4.56	9
4	Baltimore, Md.....			1.16	6					1.16	3
5	Detroit, Mich.....			1.51	8	.65	6	.55	3	2.71	5
6	Buffalo, N. Y.....	.24	1	2.14	11	.29	4			2.67	4
7	San Francisco, Cal.....			4.21	12			.78	4	4.99	12
8	Milwaukee, Wis.....			1.45	7	.18	3	3.23	6	4.86	10
9	Newark, N. J.....	.80	2	6.42	13	1.49	7	3.23	6	8.71	13
10	New Orleans, La.....	2.25	6	1.65	9					3.90	8
11	Washington, D. C.....	1.87	4	1.04	3					2.91	6
12	Los Angeles, Cal.....			.64	2					.64	2
13	Minneapolis, Minn.....			.16	1	.08	1			.24	1

GROUP II.—CITIES HAVING A POPULATION OF 100,000 TO 300,000 IN 1910.

14	Jersey City, N. J.....			1.70	11	0.13	2			1.83	11
15	Providence, R. I.....			4.10	16					4.10	17
16	St. Paul, Minn.....					.26	3			.26	1
17	Portland, Oreg.....			.66	3			1.86	2	2.52	13
18	Columbus, Ohio.....	.42	1	.10	1					.52	3
19	Toledo, Ohio.....										
20	Oakland, Cal.....			1.74	12					1.74	10
21	Syracuse, N. Y.....			1.03	7	.06	1			1.09	7
22	New Haven, Conn.....			1.31	8	.37	6			1.68	9
23	Birmingham, Ala.....										
24	Memphis, Tenn.....			.68	4					.68	4
25	Scranton, Pa.....			2.20	13					2.20	12
26	Paterson, N. J.....			1.52	9					1.52	8
27	Omaha, Nebr.....			1.01	6					1.01	6
28	Grand Rapids, Mich.....			1.60	10	.28	4	.78	1	2.66	14
29	Nashville, Tenn.....			.86	5					.86	5
30	Lowell, Mass.....			5.54	17					5.54	18
31	Cambridge, Mass.....			3.13	15	.34	5			3.47	16
32	Spokane, Wash.....			.28	2					.28	2
33	Albany, N. Y.....			2.76	14					2.76	15

GROUP III.—CITIES HAVING A POPULATION OF 50,000 TO 100,000 IN 1910.

34	Hartford, Conn.....			3.70	30	0.79	3			4.49	30
35	Trenton, N. J.....			1.54	20			3.34	2	4.88	32
36	New Bedford, Mass.....	4.12	7	2.05	24					6.17	34
37	Reading, Pa.....			1.81	22					1.81	21
38	Camden, N. J.....			.65	11					.65	8

TABLE 27.—Showing for each object of expense of instruction, operation, and maintenance of all schools the percentage of total expenses, based on Table 20.

Cities.	Salaries of teachers.		Salaries and expenses of supervisors.		Text-books, stationery, and general school supplies.		Janitors, engineers, and firemen.		Fuel.		Water.		Light power.		Janitors' supplies and sundry expenses.		Apparatus and manual training equipment.		School libraries.		Repairs and replacements of equipment.		Repairs to buildings.		Total.	
	Percentage.	Rank.	Percentage.	Rank.	Percentage.	Rank.	Percentage.	Rank.	Percentage.	Rank.	Percentage.	Rank.	Percentage.	Rank.	Percentage.	Rank.	Percentage.	Rank.	Percentage.	Rank.	Percentage.	Rank.	Percentage.	Rank.	Percentage.	Rank.	Percentage.
Group I: Median.....	69.55	7	1.45	6	3.75	7	6.55	7	2.86	7	0.55	3+	0.615	6+	1.44	7	0.445	6+	0.27	3+	0.79	6	5.245	6+	95.40	7
Middle 50 per cent.....	{ 66.80 to 73.90	{ 4 to 10	{ 1.015 to 2.885	{ 4 to 8	{ 4.45 to 4.11	{ 4 to 10	{ 5.25 to 7.52	{ 4 to 10	{ 1.58 to 3.21	{ 4 to 10	{ .34 to 1.05	{ 4 to 8	{ .86 to 2.48	{ 4 to 10	{ .86 to 2.48	{ 4 to 10	{ .33 to 0.99	{ 4 to 9	{ .27 to	{ 3 to	{ .47 to 2.44	{ 4 to 8	{ 4.12 to 7.57	{ 4 to 9	{ 93.81 to 95.93	{ 4 to 9
Group II: Median.....	69.97	10+	1.20	8	3.12	10+	6.435	10+	3.685	10+	.41	6	.37	9	.88	9+	1.195	6+	.15	6	.70	8	4.735	10+	94.905	10+
Middle 50 per cent.....	{ 67.31 to 72.82	{ 6 to 15	{ .76 to 4.765	{ 5 to 11	{ 2.37 to 3.68	{ 6 to 14	{ 5.72 to 7.71	{ 6 to 15	{ 2.37 to 4.60	{ 6 to 15	{ .325 to 1.555	{ 4 to 8	{ .27 to 1.29	{ 5 to 12	{ .60 to 1.29	{ 5 to 14	{ .745 to 1.79	{ 5 to 9	{ .07 to .41	{ 3 to 9	{ .465 to .98	{ 5 to 11	{ 3.19 to 6.97	{ 5 to 15	{ 94.08 to 95.94	{ 6 to 15
Group III: Median.....	67.61	21+	2.55	17	4.59	19+	6.66	20+	3.56	19	.40	7+	.42	15	1.19	20+	.525	13+	.23	7+	.81	16	4.965	19+	94.44	21+
Middle 50 per cent.....	{ 64.18 to 70.33	{ 12 to 31	{ 1.27 to 3.49	{ 9 to 25	{ 2.31 to 5.64	{ 11 to 29	{ 5.82 to 7.63	{ 12 to 29	{ 2.46 to 4.25	{ 11 to 29	{ .275 to 1.63	{ 5 to 11	{ .245 to 1.805	{ 10 to 22	{ .83 to 2.08	{ 11 to 30	{ .35 to 1.21	{ 8 to 20	{ .08 to .56	{ 4 to 10	{ .43 to 1.71	{ 9 to 24	{ 3.77 to 6.71	{ 11 to 29	{ 92.80 to 95.50	{ 12 to 31
Group IV: Median.....	65.795	14+	2.455	11+	2.80	14+	7.145	14+	4.22	14	.43	8	.44	13	1.05	14	1.03	7+	.215	6+	.905	9+	5.54	13+	93.855	13+
Middle 50 per cent.....	{ 63.80 to 68.70	{ 8 to 21	{ 1.57 to 4.27	{ 6 to 17	{ 1.58 to 4.90	{ 8 to 21	{ 6.53 to 7.77	{ 8 to 21	{ 2.57 to 5.46	{ 8 to 20	{ .28 to 1.58	{ 5 to 10	{ .21 to 1.08	{ 7 to 18	{ .685 to 1.96	{ 8 to 20	{ .585 to 1.24	{ 5 to 10	{ .13 to .50	{ 4 to 9	{ .51 to 1.79	{ 5 to 14	{ 3.205 to 6.69	{ 7 to 19	{ 92.70 to 94.93	{ 7 to 20

GROUP I.—CITIES HAVING A POPULATION OF 300,000 OR OVER IN 1910.

1	Chicago, Ill.....	69.29	6	0.29	1	2.17	5	8.02	11	3.07	9	.....	0.34	4	0.49	3	0.40	6	0.18	2	0.08	1	7.97	10	92.39	3	
2	St. Louis, Mo.....	67.72	5	1.50	7	3.94	9	6.77	9	1.58	4	0.21	.2	.60	6	1.31	6	.29	3	.06	1	.42	3	3.28	2	87.08	1
3	Cleveland, Ohio.....	62.40	2	5.90	10	1.02	7	6.52	10	2.86	7	.....	.63	7	3.90	12	.33	4	.....	.....	.....	.29	2	4.80	5	89.65	2
4	Baltimore, Md.....	69.55	7	.40	2	5.68	11	7.64	8	3.29	11	.....	.65	8	.03	1	.34	5	.....	.....	.....	.62	5	7.19	8	93.81	4
5	Detroit, Mich.....	73.90	10	.79	3	3.29	6	8.29	12	2.80	6	.....	.03	1	2.24	9	2.17	12	.....	.....	.....	.....	.....	.....	.....	96.15	10

GROUP II.—CITIES HAVING A POPULATION OF 100,000 TO 300,000 IN 1910.

6	Buffalo, N. Y.	61.85	1	7.98	11	3.90	8	5.80	6	2.94	8	.90	5	.81	9	2.75	11	.99	9	.36	6	2.06	8	5.41	7	95.75
7	San Francisco, Cal.	76.06	12	1.45	8	.51	1	8.45	13	.61	1	.81	4	.86	3	2.48	10	.23	2	1.15	7	3.99	3	94.60		
8	Milwaukee, Wis.	71.32	9	1.65	6	1.45	4	5.45	5	3.65	13	.95	6	.86	11	.38	10	1.88	11	.33	5	7.57	9	96.40		
9	Newark, N. J.	70.97	8	1.45	6	3.75	7	5.25	4	1.88	5	.29	3	.85	10	.86	4	.49	7	.....	.....	10	5.08	6	94.46	
10	New Orleans, La.	66.30	3	1.38	5	5.30	12	4.50	1	.82	2	.....	.....	.12	2	6.47	13	.....	.....	.....	.....	10	8.22	11	95.93	
11	Washington, D. C.	66.80	4	4.12	9	4.11	10	5.07	3	3.64	12	.....	.....	.42	5	.98	5	1.06	10	.25	3	.53	4	9.31	12	96.29
12	Los Angeles, Cal.	80.48	13	.....	3	1.20	3	4.83	2	1.31	3	.01	1	.63	7	1.44	7	.65	8	.29	4	.79	6	4.12	4	95.75
13	Minneapolis, Minn.	74.50	11	1.24	4	6.87	13	6.55	7	3.21	10	.....	.....	.....	.....	1.56	8	.20	1	.....	.....	4.18	11	.....	.....	98.31

14	Jersey City, N. J.	74.57	19	1.01	6	3.29	11	5.72	6	3.63	10	.....	.....	.028	6	0.60	5	1.85	10	0.02	2	0.57	6	4.76	11	96.30
15	Providence, R. I.	66.26	4	1.20	8	4.21	16	6.83	12	5.29	18	0.57	9	.34	8	.46	2	.....	.....	.08	4	.80	10	8.46	17	94.50
16	St. Paul, Minn.	72.82	15	1.09	7	.27	1	12.80	20	3.47	9	.59	10	.47	10	.79	8	1.93	11	1.06	11	.....	.....	3.44	8	97.84
17	Portland, Oreg.	73.82	17	.....	8	2.62	8	5.02	2	1.46	3	.41	6	.47	10	.66	6	1.07	12	.01	.....	.....	6.97	15	83.50	
18	Columbus, Ohio	61.93	1	11.73	15	2.49	7	7.71	15	3.42	8	.....	.....	.....	7.73	9	1.59	12	1.49	13	2.50	4	2.50	13	95.25	
19	Toledo, Ohio	74.33	18	.61	4	3.92	15	4.51	1	4.12	14	.....	.....	.27	5	3.76	19	2.18	12	.....	.....	1.04	12	1.48	2	96.22
20	Oakland, Cal.	78.56	20	.....	2	2.03	4	5.09	4	.96	1	.38	5	.33	7	.92	10	1.16	6	.59	10	2.02	14	5.42	12	97.46
21	Syracuse, N. Y.	68.75	9	.21	2	2.63	9	6.51	11	5.76	20	.....	.....	.71	15	2.13	16	.59	4	.....	.....	3.87	9	91.16		
22	New Haven, Conn.	67.31	6	6.73	12	3.68	14	8.35	17	4.60	15	.....	.....	.47	10	1.84	15	.27	3	.41	9	.21	3	.33	1	95.10
23	Birmingham, Ala.	67.13	5	9.06	14	3.57	2	6.12	3	2.78	7	.47	7	.54	11	1.07	12	1.43	8	.15	6	.11	2	3.36	7	92.79
24	Memphis, Tenn.	71.52	12	2.80	11	3.44	12	7.63	14	2.04	5	.54	8	.17	2	1.03	1	.....	.....	.07	3	2.47	15	2.37	3	94.08
25	Scranton, Pa.	69.43	10	.....	6	3.30	18	8.08	16	3.75	12	1.02	11	.21	4	.55	3	.....	.....	.....	.....	2.94	5	92.28	2	.....
26	Paterson, N. J.	73.40	16	.20	1	2.12	5	5.08	3	1.64	4	.21	1	.08	1	.42	1	.....	.....	.....	.....	.78	9	10.85	20	94.78
27	Omaha, Nebr.	70.41	11	.....	3	3.64	13	7.37	13	3.96	13	.....	.....	3	1.29	14	1.16	6	.....	.....	.43	4	6.41	14	94.85	
28	Grand Rapids, Mich.	64.32	3	8.93	13	2.95	10	6.16	9	2.37	6	.30	3	.69	13	4.2	1	.90	5	.11	5	.50	5	8.29	16	95.94
29	Nashville, Tenn.	72.10	13	1.93	10	1.78	3	5.25	5	1.33	2	.25	2	.30	2	1.08	13	.....	.....	.07	3	.61	7	10.56	19	94.96
30	Lowell, Mass.	63.62	2	.....	3	3.29	11	10.70	19	4.80	16	.35	4	1.06	16	.56	4	.07	1	.....	.....	.09	1	9.42	18	93.96
31	Cambridge, Mass.	68.34	7	.24	3	2.37	6	8.36	18	5.64	19	.....	.....	.62	12	.76	7	2.44	13	.....	.....	.92	11	5.83	13	95.52
32	Spokane, Wash.	68.44	8	.91	5	6.34	19	6.36	10	3.74	11	.....	.....	.37	9	3.55	18	1.23	7	.29	7	3.19	6	94.42	7	.....
33	Albany, N. Y.	72.34	14	1.30	9	5.26	17	5.85	7	5.20	17	.....	.....	.70	14	.84	9	.13	2	.37	8	.70	8	4.71	10	97.40

GROUP III.—CITIES HAVING A POPULATION OF 50,000 TO 100,000 IN 1910.

34	Hartford, Conn.	62.15	7	6.72	28	5.40	27	6.21	17	4.06	26	.....	.....	1.06	27	3.68	39	.....	.....	0.32	9	0.72	15	4.40	16	95.30
35	Trenton, N. J.	71.92	36	1.30	10	4.05	21	5.52	9	3.20	17	.....	.....	.40	14	2.52	34	2.00	26	.04	2	.66	14	2.32	4	94.53
36	New Bedford, Mass.	63.75	10	2.70	20	5.16	26	7.41	26	4.92	33	.....	.....	.30	11	1.30	22	.50	13	.....	.....	.35	7	5.88	25	92.25
37	Reading, Pa.	69.56	30	.56	2	5.64	29	10.04	38	4.12	27	.....	.....	.14	6	1.27	21	.69	7	.....	.....	1.24	21	2.69	6	95.55
38	Camden, N. J.	68.24	24	1	5.03	28	8.26	34	3.38	15	.08	1	.18	7	.69	9	1.44	24	2.13	27	5.75	24	95.65
39	Dallas, Tex.	69.24	27	12.88	33	1.28	4	6.02	14	2.02	10	3.36	5	.71	16	1.99	25	95.50
40	Springfield, Mass.	62.84	9	5.76	27	5.14	25	7.41	26	5.76	37	.....	.....	1.15	29	2.35	32	1.25	22	.....	.....	.58	12	3.39	8	95.63

TABLE 28.—Showing for each item of miscellaneous expenses the percentage of total expenses; based on Table 21.

Cities.	School census and elections.		Truant officers and police.		Medical inspectors and nurses.		Pensions.		Rent.		Insurance.		Transportation of pupils.		Payments to schools and institutions.		Other miscellaneous expenses.		Total.		
	Per-cent- age.	Rank.	Per-cent- age.	Rank.	Per-cent- age.	Rank.	Per-cent- age.	Rank.	Per-cent- age.	Rank.	Per-cent- age.	Rank.	Per-cent- age.	Rank.	Per-cent- age.	Rank.	Per-cent- age.	Rank.	Per-cent- age.	Rank.	
Group I: Median.....	0.16	3	0.435	3+	0.30	5	0.75	3+	0.30	6+	0.095	4+	0.095	1+	1.06	4+	0.20	4	2.32	7	
Middle 50 per cents.....			{.16 to to .49}	{2 to to 5}	{.25 to to .37}	{3 to to 6}			{.15 to to .44}	{4 to to 9}	{.07 to to .27}	{3 to to 6}			{.73 to to 1.40}	{3 to to 6}		{1.58 to to 3.10}	{4 to to 10}		
Group II: Median.....	.24	6	.24	6	.235	3+	.475	3+	.275	6+	.36	7+	.06	2	.68	4+	.25	4	2.24	10	
Middle 50 per cents.....	{.16 to to .34}	{4 to to 8}	{.21 to to .39}	{4 to to 9}	{.19 to to .32}	{3 to to 5}			{.09 to to .50}	{4 to to 9}	{.10 to to 1.00}	{4 to to 11}			{.53 to to 1.61}	{3 to to 6}		{1.15 to to 3.10}	{6 to to 14}		
Group III: Median.....	.195	10+	.36	14	.36	6	.81	6	.34	14+	.49	16	.22	5	.415	8+	.16	3+	2.075	18+	
Middle 50 per cents.....	{.15 to to .38}	{7 to to 14}	{.285 to to .655}	{9 to to 22}	{.27 to to .475}	{4 to to 9}	{.48 to to 1.035}	{4 to to 8}	{.14 to to .58}	{8 to to 20}	{.27 to to .89}	{8 to to 25}			{.14 to to .41}	{3 to to 7}			{.27 to to 3.01}	{5 to to 26}	
Group IV: Median.....	.195	9+	.48	13	.30	4+			.395	6+	.57	8	.50	1+	.26	4	.75	3	2.62	21+	
Middle 50 per cents.....	{.14 to to .34}	{6 to to 14}	{.30 to to .58}	{7 to to 19}	{.20 to to .38}	{3 to to 6}			{.29 to to .57}	{4 to to 9}	{.31 to to 1.26}	{5 to to 13}							{1.37 to to 2.49}	{8 to to 21}	

GROUP I.—CITIES HAVING A POPULATION OF 300,000 OR OVER IN 1910.

1 Chicago, Ill.....	0.06	1	0.49	5	0.26	4	0.71	2	0.55	10			0.09	1	1.30	5	0.35	7	3.51	11
2 St. Louis, Mo.....	.16	3	.52	6	.09	1			.15	4	0.08	4	.10	2	2.63	8	.28	5	4.05	13
3 Cleveland, Ohio.....	.15	2	.40	3	.30	5			.07	1	.04	2			1.40	6			2.32	7
4 Baltimore, Md.....			.49	5	.30	5			2.58	12	.07	3			.49	1	.10	2	4.02	12
5 Detroit, Mich.....	.27	4	.47	4	.40	7	.73	3	.16	5	.02	1							2.05	5

TABLE 28.—Showing for each item of miscellaneous expenses the percentage of total expenses; based on Table 21—Continued.

GROUP III.—CITIES HAVING A POPULATION OF 50,000 TO 100,000 IN 1910—Continued.

Cities.	School census and elections.		Truant officers and police.		Medical inspectors and nurses.		Pensions.		Rent.		Insurance.		Transportation of pupils.		Payments to schools and institutions.		Other miscellaneous expenses.		Total.	
	Per-cent- age.	Rank.	Per-cent- age.	Rank.	Per-cent- age.	Rank.	Per-cent- age.	Rank.	Per-cent- age.	Rank.	Per-cent- age.	Rank.	Per-cent- age.	Rank.	Per-cent- age.	Rank.	Per-cent- age.	Rank.	Per-cent- age.	Rank.
41 Wilmington, Del.	.11	5							.10	6	.15	3						.36	1	
42 Des Moines, Iowa	.14	6	.30	10	.16	2			.36	12	.08	2	.18	4	.49	11	.89	6	2.52	22
43 Lawrence, Mass.	.24	12	1.18	31	.84	12			.47	19	.08	2			.75	13	.24	5	3.80	32
44 Tacoma, Wash.	.38	14	.20	3							.89	25			.48	10			1.95	16
45 Kansas City, Kans.	.20	11	.36	14							.48	15							1.04	5
46 St. Joseph, Mo.	.48	17	.34	12	.16	2			.14	8	.17	4							1.29	11
47 Troy, N. Y.	.02	2	.45	17					.58	20	.18	5			5.30	15	.06	1	7.40	35
48 Utica, N. Y.			.66	23					1.06	24	1.66	32							3.38	28
49 Elizabeth, N. J.			.19	2	.45	9			.33	14	.96	27			.58	12			3.09	27
50 Schenectady, N. Y.			.65	22	.37	7							.02	1					2.13	19
51 Hoboken, N. J.			.61	21					.41	18	.59	18	.41	7			.14	3	2.94	25
52 Manchester, N. H.	.62	18	.74	26					.08	5	.52	17							1.96	17
53 Evansville, Ind.	.19	10	.36	14							.20	6					.18	4	1.04	5
54 Norfolk, Va.									1.23	26	.02	1							1.25	10
55 Wilkes-Barre, Pa.			.17	1							.40	13							.57	2
56 Peoria, Ill.	.19	10	.27	7					.39	16	1.12	28							2.00	18
57 Erie, Pa.	.18	9	.52	19							1.76	33					.07	2	2.53	23
58 Savannah, Ga.	.65	19							.16	9	.31	10							1.12	8
59 Oklahoma, Okla.	.01	1	.71	25					.25	11	2.43	34					.24	4	3.40	29
60 Harrisburg, Pa.			.22	4	.33	5					.40	13							2.50	21
61 Charleston, S. C.											1.15	29			22.40	16			25.00	37
62 Portland, Me.	.62	16	.34	12					.05	3	1.50	31	.68	8					2.97	26
63 East St. Louis, Ill.	.69	20	1.11	29					1.17	25	.93	26							3.90	33
64 Holyoke, Mass.	.07	3	1.13	30	.36	6			.35	15			.20	6	.15	3			2.35	20
65 Jacksonville, Fla.									.06	4	.63	20	7.60	9	.41	8			8.70	36
66 Brockton, Mass.	.15	7	.28	8	.50	10							.04	2	.02	1			1.07	7
67 Bayonne, N. J.			.35	13	.22	3			.91	22	.25	7							1.73	15
68 Johnstown, Pa.			.24	5					.04	2	.72	22							1.00	3
69 Passaic, N. J.			.38	15	.38	8			.29	13	.43	14			.27	5			2.15	19
70 Wichita, Kans.			.32	11					.27	12	.27	8			.30	6			1.16	9

GROUP IV.—CITIES HAVING A POPULATION OF 30,000 TO 50,000 IN 1910.

71	Covington, Ky.....	.41	15	1.09	28	1.88	27	.28	9											3.66	31	
72	Allentown, Pa.....			.55	20			.80	23											1.35	12	
73	Springfield, Ill.....			.42	16	.35	15	.27	8											1.04	5	
74	Saginaw, Mich.....	.17	8					.83	24			.42								1.42	13	
75	Canton, Ohio.....	.24	12	.30	10			.49	16											1.03	4	
76	Sioux City, Iowa.....			.30	7					0.21	3	1.69	16	0.72	2						2.92	18
77	Lancaster, Pa.....	.80	22	.28	6			.08	3											2.36	18	
78	Atlantic City, N. J.....	.98	23	.62	8															1.60	12	
79	Little Rock, Ark.....	0.25	11					2.16	17											2.41	20	
80	Rockford, Ill.....	.11	3	.25	3															.36	2	
81	Bay City, Mich.....	.34	14	.75	21			.28	4											1.37	8	
82	York, Pa.....			.28	6			1.20	12											2.23	17	
83	Sacramento, Cal.....	.27	12	.48	13	.58	10	.57	8											1.90	14	
84	Chattanooga, Tenn.....			.16	1	.34	5	.31	5											1.07	6	
85	Malden, Mass.....	.13	5	.44	12	.24	4													1.07	5	
86	Pueblo, Colo.....	.42	15	.71	20			.05	9											2.12	16	
87	Haverhill, Mass.....	.07	1	.43	11			1.03	10											3.72	28	
88	New Britain, Conn.....	.21	10	.49	14			1.26	13											11.50	28	
89	Topeka, Kans.....	.12	4	.17	2			1.18	11											1.47	11	
90	Davenport, Iowa.....	.10	2	.26	4			.57	8											4.93	27	
91	Wheeling, W. Va.....	.18	9	.56	18			.01	1											1.40	10	
92	Chester, Pa.....			.50	15					.65	11	.01	1							.50	3	
93	Dubuque, Iowa.....	.34	14	.31	8			.07	2											1.23	7	
94	Woonsocket, R. I.....	.34	14	1.60	25	.16	2	.28	4											2.49	21	
95	Racine, W. S.....	.17	8																	.17	1	
96	Knoxville, Tenn.....			.27	5			.38	6											.06	1	
97	New Castle, Pa.....	.16	7	.32	9			.09	14											2.06	15	
98	Joliet, Ill.....	.34	14	.40	10	.07	1	.46	6											1.38	13	
99	Auburn, N. Y.....	.34	14	.40	10	.07	1	.46	6											3.00	9	
100	Taunton, Mass.....	.17	8	.53	16	.56	7													2.95	25	
101	Oshkosh, Wis.....	.14	6	.54	17			1.69	16											2.37	19	
102	Joplin, Mo.....	.32	13	.58	19															.90	4	
103	Newport, Ky.....	.46	16	1.49	24			.29	4											2.75	22	

TABLE 29.—Showing, for each object of expense, average annual cost per pupil, based on enrollment, of instruction, operation, and maintenance of elementary schools in a selected list of cities of 30,000 population and over, 1909.

Cities.	Salaries of teachers.		Salaries and expenses of supervisors.		Text-books, stationery, and general school supplies.		Janitors, engineers, and firemen.		Fuel.		Water.		Light power.		Janitors' supplies and sundry expenses.		Apparatus and manual training equipment.		School libraries.		Repairs and replacement of equipment.		Repairs to buildings.		Total.		
	Average cost.	Rank.	Average cost.	Rank.	Average cost.	Rank.	Average cost.	Rank.	Average cost.	Rank.	Average cost.	Rank.	Average cost.	Rank.	Average cost.	Rank.	Average cost.	Rank.	Average cost.	Rank.	Average cost.	Rank.	Average cost.	Rank.	Average cost.	Rank.	
Group I: Median.....	\$20.36	5+	\$0.365	4+	\$0.885	5+	\$1.725	5+	\$0.74	5+	\$0.165	2+	\$0.11	5	\$0.09	4	\$0.09	5	\$0.05	2+	\$0.20	5	\$1.50	5	\$26.54	5+	
Middle 50 per cents.....	{19.19 to 21.09	{4 to 7	{.27 to .46	{3 to 6	{.675 to 1.03	{4 to 7	{1.385 to 2.055	{4 to 7	{.515 to .845	{4 to 7	{..... to	{..... to	{.05 to .16	{3 to 7	{.07 to .19	{3 to 7	{..... to	{..... to	{..... to	{..... to	{..... to	{.12 to .56	{3 to 7	{1.09 to 1.70	{3 to 7	{24.985 to 27.65	{4 to 7
Group II: Median.....	17.65	8	.355	5+	.73	8	1.74	8	.86	8	1.05	5+	.07	6	.33	4+	.04	2+	.18	5	1.36	7	23.99	8			
Middle 50 per cents.....	{15.175 to 18.915	{4 to 11	{.20 to .52	{3 to 6	{.425 to .84	{5 to 11	{1.375 to 2.085	{5 to 11	{.395 to 1.29	{5 to 11	{.07 to .115	{3 to 5	{.045 to .125	{3 to 6	{.155 to .255	{4 to 8	{..... to	{..... to	{..... to	{..... to	{.10 to .21	{3 to 7	{.925 to 1.95	{5 to 10	{21.745 to 23.725	{5 to 11	
Group III: Median.....	15.61	14	.455	9+	1.005	13+	1.57	14	.80	14	.12	5	.08	6	.21	8	.06	2+	.245	8+	.13	6	1.45	11+	21.00	14	
Middle 50 per cents.....	{13.455 to 18.16	{8 to 20	{.28 to 1.05	{5 to 14	{.585 to 1.23	{8 to 17	{1.255 to 1.905	{8 to 20	{.61 to .98	{8 to 19	{.06 to .14	{3 to 7	{.06 to .17	{5 to 10	{.14 to .42	{5 to 14	{..... to	{..... to	{..... to	{..... to	{.13 to .51	{6 to 12	{.72 to 1.67	{6 to 17	{19.43 to 25.50	{8 to 20	
Group IV: Median.....	14.30	9	.36	6	.83	9	1.81	9	.865	8+	.105	4+	.06	4	.17	6+	.33	2+	.14	7	1.40	8	21.62	9			
Middle 50 per cents.....	{12.86 to 16.66	{5 to 12	{.295 to .715	{5 to 8	{.41 to 1.24	{5 to 13	{1.22 to 2.04	{5 to 12	{.59 to 1.31	{5 to 12	{.05 to .125	{3 to 6	{.04 to .13	{3 to 7	{.11 to .47	{4 to 10	{..... to	{..... to	{..... to	{..... to	{.10 to .38	{4 to 10	{.595 to 1.72	{5 to 11	{1.855 to 23.22	{5 to 13	

GROUP I.—CITIES HAVING A POPULATION OF 300,000 OR OVER IN 1910.

1	Chicago, Ill.	\$20.06	4	\$0.08	2	\$0.50	3	\$2.40	9	\$0.93	9	\$0.07	1	\$0.05	3	\$0.14	1	\$0.09	5	\$0.06	3	\$0.03	1	\$2.43	8	\$26.77	6	
2	St. Louis, Mo.	18.30	3	.42	5	.95	7	1.32	4	.40	4	.34	3	.04	2	.02	1	.09	2	.02	1	.09	2	.97	2	23.17	3	
3	Baltimore, Md.	13.95	1	.04	1	.85	4	1.40	1	.73	5	.03	1	.11	5	.34	3	.03	2	.03	4	.14	4	1.54	6	18.71	1	
4	Detroit, Mich.	20.20	5	.27	3	.89	6	2.24	8	.78	7	.38	5	.01	1	.38	5	.75	9	.07	4	.56	7	.79	4	26.31	5	
5	Buffalo, N. Y.	14.32	2	1.99	8	.88	5	1.37	3	.75	6	.23	3	.17	8	.64	7	.19	7	.07	4	.56	7	1.34	4	22.51	2	
6	San Francisco, Cal.	26.43	10	.19	1	3.38	10	.22	1	.22	1	.31	4	.04	2	.96	8	.08	4	.04	4	.46	6	1.50	5	33.57	10	
7	Newark, N. J.	20.94	6	1.11	8	1.66	5	.63	4	.10	2	.10	2	.10	4	.19	2	.13	6	.04	4	1.17	9	1.70	7	28.19	8	
8	Washington, D. C.	21.24	8	1.05	7	1.52	9	1.79	6	1.35	10	.23	6	.12	6	.34	3	.23	8	.04	2	.12	3	3.55	9	31.32	9	
9	Los Angeles, Cal.	21.48	9	.33	2	1.34	2	1.34	2	.32	2	.22	2	.16	7	.37	4	.07	3	.04	2	.20	5	1.09	3	25.40	4	
10	Minneapolis, Minn.	20.52	6	.31	4	1.88	10	1.87	7	.91	8	.51	6	.11	8	.51	6	.07	3	.04	2	1.11	8	1.09	3	25.40	4	
11																										27.11	7	
12																												

GROUP II.—CITIES HAVING A POPULATION OF 100,000 TO 300,000 IN 1910.

16	St. Paul, Minn.	\$17.15	7	\$0.32	3	\$0.08	1	\$3.18	15	\$0.86	8	\$0.15	7	\$0.11	6	\$0.55	11	\$0.48	8	\$0.21	4	\$0.63	9	\$0.84	4	\$23.13	6
17	Portland, Ore.	19.35	12	.55	6	.77	10	1.74	3	.33	3	.11	5	.07	4	.19	8	.35	6	.35	6	.48	9	1.92	9	24.37	9
18	Oakland, Cal.	24.70	15	.77	1	.73	8	1.41	5	1.53	15	.12	6	.14	7	.40	10	.17	3	.01	5	1.01	5	1.95	11	31.10	15
19	Syracuse, N. Y.	15.55	4	.06	1	.73	8	1.41	5	1.53	15	.12	6	.14	7	.40	10	.17	3	.01	5	1.01	5	1.95	11	31.10	15
20	Birmingham, Ala.	10.05	1	1.49	8	.09	2	.82	1	.37	4	.06	2	.14	7	.40	10	.17	3	.01	5	1.01	5	1.95	11	31.10	15
21	Memphis, Tenn.	14.03	3	.62	7	.71	7	1.54	6	.42	5	.11	5	.04	2	.18	6	.62	8	.53	8	.53	8	.62	1	18.70	3
22	Scranton, Pa.	16.95	6	1.77	14	2.24	13	1.16	10	.30	8	.03	1	.12	1	.12	1	.12	1	.12	1	.12	1	.73	3	23.30	7
23	Paterson, N. J.	18.09	9	.06	1	.44	5	1.34	4	.48	6	.06	2	.04	2	.26	9	.32	4	.32	4	.21	7	3.19	4	23.99	8
24	Omaha, Nebr.	18.47	10	.84	11	2.09	12	1.14	9	.76	7	.08	3	.20	9	.14	2	.34	5	.34	5	.09	2	1.95	10	25.20	11
25	Grand Rapids, Mich.	19.42	13	2.63	9	.84	12	1.91	9	.76	7	.08	3	.20	9	.14	2	.34	5	.34	5	.17	4	3.00	12	29.49	14
26	Nashville, Tenn.	12.25	2	.35	4	.29	3	.85	2	.23	1	.04	1	.15	8	.17	5	.04	1	.01	1	.10	3	1.82	8	15.12	2
27	Lowell, Mass.	17.65	8	.76	9	3.10	14	1.39	13	.10	4	.10	4	.15	8	.17	5	.04	1	.01	1	.10	3	3.03	13	26.35	12
28	Cambridge, Mass.	16.32	5	.08	2	.41	4	2.07	10	1.38	12	.10	4	.07	4	.15	3	.47	7	.03	2	.18	5	1.36	7	22.49	5
29	Spokane, Wash.	20.70	14	.36	5	1.82	15	2.08	11	1.20	11	.10	4	.05	3	1.09	12	.06	2	.03	2	.18	5	1.01	5	28.40	13
30	Albany, N. Y.	18.58	11	.42	6	1.24	13	1.60	7	1.49	14	.10	4	.09	5	.16	4	.01	1	.05	3	.20	6	1.29	6	25.13	10

GROUP III.—CITIES HAVING A POPULATION OF 50,000 TO 100,000 IN 1910.

35	Trenton, N. J.	\$19.97	23	\$0.42	9	\$1.16	17	\$1.57	14	\$0.97	19	\$0.06	5	\$0.71	19	\$0.01	6	\$0.14	1	\$0.14	1	\$0.14	6	\$0.09	4	\$25.70	21
36	Reading, Pa.	15.71	15	.16	2	1.03	13	2.33	25	1.03	21	.01	1	.25	10	\$0.08	4	.30	10	.30	10	.70	5	1.60	7	21.60	14
37	Camden, N. J.	19.20	22	.04	1	1.60	20	2.19	24	.91	17	\$0.03	1	.03	3	.17	7	.21	10	.03	3	.60	13	1.12	11	26.10	23
38	Dallas, Tex.	11.13	2	2.50	18	.21	2	.91	2	.38	3	.38	3	.05	1	.05	1	.05	1	.05	1	.42	12	1.29	6	15.60	2

TABLE 29.—Showing, for each object of expense, average annual cost per pupil, based on enrollment, of instruction, operation, and maintenance of elementary schools in a selected list of cities of 30,000 population and over, 1909—Continued.

GROUP III.—CITIES HAVING A POPULATION OF 50,000 TO 100,000 IN 1910—Continued.

Cities.	Salaries of teachers.		Salaries and expenses of super- visors.		Text- books, station- ery, and general school supplies.		Janitors, engineers, and fire- men.		Fuel.		Water.		Light power.		Janitors, supplies and sun- dry ex- penses.		Appa- ratus and manual train- ing equip- ment.		School libraries.		Repairs and re- place- ment of equip- ment.		Repairs to build- ings.		Total.	
	Average	Rank	Average	Rank	Average	Rank	Average	Rank	Average	Rank	Average	Rank	Average	Rank	Average	Rank	Average	Rank	Average	Rank	Average	Rank	Average	Rank	Average	Rank
41 Wilmington, Del.....	\$14.31	13	\$0.78	10	\$0.92	18	\$0.14	5	\$0.11	7	\$0.06	5	\$0.14	5	\$0.17	7	\$0.11	7	\$0.01	1	\$18.76	9	\$1.37	15	\$18.76	9
42 Des Moines, Iowa.....	18.42	21	2.04	23	2.12	23	2.12	23	1.99	20	0.24	14	0.17	7	0.20	9	0.20	9	0.03	1	26.30	24	1.67	17	26.30	24
43 Lawrence, Mass.....	21.04	26	1.12	16	1.80	26	0.64	17	1.80	26	0.24	14	0.64	17	0.09	5	0.09	5	0.03	1	30.08	27	1.81	18	30.08	27
44 Tacoma, Wash.....	17.90	20	1.12	16	1.73	17	0.42	14	1.73	17	0.05	5	0.42	14	0.08	3	0.08	3	0.34	11	25.30	20	1.46	2	25.30	20
45 Kansas City, Kans.....	14.14	11	0.41	4	0.76	12	0.12	5	0.76	12	0.02	2	0.12	5	0.08	3	0.08	3	0.05	2	18.05	4	0.97	9	18.05	4
48 Utica, N. Y.....	16.74	19	0.51	6	1.85	19	0.55	16	1.50	24	0.23	13	0.55	16	0.01	1	0.01	1	0.03	1	22.15	17	0.72	6	22.15	17
49 Elizabeth, N. J.....	14.04	10	0.33	7	1.94	19	0.14	5	1.65	24	0.07	4	0.14	5	0.08	4	0.08	4	1.53	17	19.70	8	0.46	2	19.70	8
50 Schenectady, N. Y.....	15.61	14	0.78	12	0.99	3	0.21	11	1.05	23	0.21	11	0.21	11	0.08	4	0.08	4	1.11	2	21.02	11	0.46	2	21.02	11
51 Hoboken, N. J.....	22.01	27	1.30	18	1.49	12	0.8	12	0.59	7	0.13	6	0.8	12	0.10	8	0.10	8	0.14	14	29.15	25	3.03	23	29.15	25
52 Manchester, N. H.....	16.01	16	0.71	9	1.08	5	0.20	8	1.79	25	0.20	8	0.20	8	0.12	9	0.12	9	0.10	6	21.62	15	1.17	12	21.62	15
55 Wilkes-Barre, Pa.....	13.27	5	1.54	19	1.36	9	0.06	2	0.83	16	0.06	2	0.06	2	0.06	5	0.06	5	0.06	5	19.16	7	1.63	18	19.16	7
56 Peoria, Ill.....	20.44	24	0.40	3	1.79	18	0.05	1	0.67	10	0.05	1	0.05	1	0.47	11	0.47	11	0.05	1	26.05	22	1.36	14	26.05	22
57 Erie, Pa.....	13.50	8	2.17	16	1.11	15	0.21	11	1.04	22	0.21	11	0.21	11	0.03	2	0.03	2	0.12	5	20.82	10	0.62	3	20.82	10
58 Savannah, Ga.....	12.59	4	0.57	1	0.57	1	0.08	2	0.22	1	0.08	2	0.08	2	0.08	2	0.08	2	0.12	5	13.71	1	0.25	1	13.71	1
59 Oklahoma, Okla.....	13.41	7	0.66	11	1.17	7	0.03	1	0.42	4	0.03	1	0.03	1	0.09	7	0.09	7	0.08	2	18.39	5	1.21	13	18.39	5
60 Harrisburg, Pa.....	13.33	6	1.84	22	1.92	21	0.80	14	0.80	14	0.03	1	0.09	7	0.08	2	0.08	2	0.62	14	20.10	9	1.08	10	20.10	9
63 East St. Louis, Ill.....	12.55	3	0.63	8	2.76	26	0.24	9	0.47	6	0.24	9	0.04	4	0.17	8	0.17	8	0.14	3	21.38	13	0.96	8	21.38	13
67 Bayonne, N. J.....	21.00	25	1.76	21	1.69	16	0.93	20	0.72	11	0.26	10	0.93	20	0.09	5	0.09	5	0.42	12	24.28	26	2.39	20	24.28	26
68 Johnstown, Pa.....	14.21	12	0.38	8	1.93	22	0.26	10	0.63	8	0.26	10	0.02	2	0.02	2	0.02	2	0.02	2	22.14	16	0.76	7	22.14	16
69 Passaic, N. J.....	16.51	18	1.16	17	1.44	11	0.06	3	0.91	17	0.06	3	0.17	10	0.07	13	0.07	13	0.08	4	15.54	18	1.08	4	15.54	18
70 Wichita, Kans.....	10.96	1	0.43	5	1.06	4	0.44	5	0.44	5	0.06	3	0.17	10	0.07	18	0.07	18	0.27	9	16.25	3	2.16	19	16.25	3
71 Covington, Ky.....	16.35	17	1.05	14	1.53	13	0.36	2	0.36	2	0.06	3	0.10	8	0.32	11	0.32	11	0.07	3	22.32	19	2.44	21	22.32	19
72 Allentown, Pa.....	14.02	9	1.26	4	1.68	15	0.81	15	0.81	15	0.06	3	0.06	3	0.49	15	0.49	15	0.14	6	21.30	12	2.74	22	21.30	12

TABLE 30.—Showing for each object of expense average annual cost per pupil, based on enrollment, of instruction, operation, and maintenance of secondary schools in a selected list of cities of 50,000 population and over, 1909—Continued.

GROUP III.—CITIES HAVING A POPULATION OF 50,000 TO 100,000 IN 1910—Continued.

Cities.	Salaries of teachers.		Salaries and expenses of supervisors.		Text-books, stationery, and general school supplies.		Janitors, engineers, and firemen.		Fuel.		Water.		Light and power.		Janitors' supplies and sundry expenses.		Apparatus and manual training equipment.		School libraries.		Repairs and replacements of equipment.		Repairs to buildings.		Total.			
	Average cost.	Rank.	Average cost.	Rank.	Average cost.	Rank.	Average cost.	Rank.	Average cost.	Rank.	Average cost.	Rank.	Average cost.	Rank.	Average cost.	Rank.	Average cost.	Rank.	Average cost.	Rank.	Average cost.	Rank.	Average cost.	Rank.	Average cost.	Rank.	Average cost.	
51 Hoboken, N. J.	\$68.20	26			\$9.75	22	\$6.06	26	\$1.90	20	\$0.05	3	\$0.17	3	\$0.81	16	\$3.55	11			\$0.51	8	\$6.55	22	\$97.55	27		
52 Manchester, N. H.	28.60	5			4.09	16	2.33	10	1.92	21	.28	9	.41	11	.51	12					.78	11	1.31	10	40.23	4		
55 Wilkes-Barre, Pa.	20.60	1	\$0.05	1	1.02	5	1.06	1	.25	1	.03	1	.11	2	.39	11	.68	2			1.27	14		25.47	1			
56 Peoria, Ill.	36.93	13	4.05	9	.55	2	2.53	11	1.74	18			.19	5	.15	4	.71	3					1.41	11	48.26	13		
57 Erie, Pa.	24.91	3	5.93	11	5.19	20	2.89	15	1.67	17			.40	10	2.19	24					.23	5	.38	1	43.79	7		
58 Savannah, Ga.	32.96	8	3.39	6			1.83	5	.41	2			.19	4	.14	3	1.54	5			.82	12	1.20	8	42.00	6		
59 Oklahoma, Okla.	35.48	12			2.93	11	1.16	2	.41	2											.47	6	2.48	16	55.35	20		
60 Harrisburg, Pa.	39.46	19			4.40	18	3.59	20	1.89	19	.04	2	.42	12	.08	1	2.52	10										
63 East St. Louis, Ill.	37.06	15	3.73	7	.70	3	3.43	19	1.42	14	.78	11	.39	9	.31	8					.63	10	.93	6	49.60	15		
67 Bayonne, N. J.	47.14	23			4.86	19	3.20	18	1.27	10					3.11	25					\$0.22	2	2.71	17	62.29	23		
68 Johnston, Pa.	39.37	18	4.39	10	10.10	23	2.84	14	.52	3	.14	4	.03	1									4.19	19	61.38	22		
69 Passaic, N. J.	65.36	25			12.22	24	2.75	13	1.29	12	.19	6	.56	14	.19	6	7.46	13					.61	5	90.02	26		
70 Wichita, Kans.	20.95	2	2.55	4	.48	1	1.56	4	.86	6					.69	15								27.70	2			
71 Covington, Ky.	32.55	6					2.72	12	.72	5	.26	8	.40	10	1.29	23							2.2	4	44.57	9		
72 Allentown, Pa.	33.72	10			3.72	14	1.53	3	2.11	22					1.05	21					.86	5	1.05	7	44.04	8		

GROUP IV.—CITIES HAVING A POPULATION OF 30,000 TO 50,000 IN 1910.

76 Sioux City, Iowa.	\$16.66	12	\$0.24	3	\$0.17	2	\$2.02	11	\$1.39	13	\$0.12	6	\$0.02	1	\$0.47	10								\$1.75	12	\$22.84	12			
77 Lancaster, Pa.	12.33	4			.89	10	1.82	10	.86	8	.10	4	.03	2	.68	12							\$0.66	12	1.28	7	18.65	7		
78 Atlantic City, N. J.	13.38	7			1.65	17	1.22	5	1.41	14	.46	9			2.52	13								1.69	11	22.33	11			
79 Little Rock, Ark.	12.91	6	.59	7	.45	6	.93	3	.59	5	.18	8	.09	6	.18	7							.38	10	.53	3	16.83	4		

81	Bay City, Mich.	14.30	9	1.96	12	.83	9	1.81	9	.77	7	.11	5	.04	3	.24	9									10	21.62	9
82	York, Pa.	12.86	5	.30	5	1.33	14	1.64	7	.87	9	.13	7	.06	4	.08	2									6	18.55	5
85	Malden, Mass.	17.48	13	.36	6	1.16	12	1.81	9	1.75	16			.06	4										8	24.20	14	
86	Pueblo, Colo.	13.95	8	1.10	10	.64	8	1.68	8	.55	3	.06	3	.07	5	.16	6								5	19.17	8	
87	Haverhill, Mass.	18.75	15	.36	6	1.24	13	2.08	14	1.46	15			.06	4	.11	3	\$0.10	1						12	26.12	17	
88	New Britain, Conn.	10.05	2	.30	5	1.54	16	1.13	4	1.06	11			.28	10	.06	1								1	14.86	2	
89	Topeka, Kans.	19.29	16	.29	4	.53	7	2.10	15	.91	10	.02	1	.14	8	.14	5	.30	2	\$0.07	3				9	25.33	16	
92	Chester, Pa.	14.98	10			1.13	11	2.12	16		12	.02	1	.02	1	.08	14									22.19	10	
93	Dubuque, Iowa.	17.54	14	1.42	11	.18	3	2.06	13	1.31	12			.13	7	.06	1	.36	3	.02	1				14	25.20	13	
95	Reaume, Wis.	14.30	9	.76	9	.23	4	1.45	6	.64	6			.13	7	.16	6	.89	4	.04	2				2	18.60	6	
96	Knoxville, Tenn.	8.64	1	.12	1	.13	1	.83	1	.18	1	.04	2	.16	9	.11	4								4	11.12	1	
97	New Castle, Pa.	15.86	11	.67	8	1.46	15	2.04	12	.57	4			.16	9	.89	11								13	23.22	13	
102	Joplin, Mo.	10.20	3	.21	2	.41	5	.90	2	.85	2					.23	8									16.20	3	

TABLE 31.—Showing ratio of expenses of schools to total city expenses and to expenses of police department and expenses of schools per capita of population in 103 cities of 30,000 population and over, 1909.

Cities.	Expenses of schools.	Total city expenses.	Ratio of school expenses to total city expenses.	Rank.	Expenses of police department.	Ratio of school expenses to expenses of police department.	Rank.	Population 1908. [Revised estimate.]	Expenses of schools per capita of population.	Rank.
Group I: Median.....	0.259	7	.....	2.12	7	.....	\$4.26	7
Middle 50 per cents.....238 to .316	4 to 10	.....	1.55 to 2.93	4 to 10	.....	3.96 to 4.76	4 to 10
Group II: Median.....3345	10+	.....	3.01	10+	.....	4.28	10+
Middle 50 per cents.....303 to .385	6 to 15	.....	2.23 to 3.41	6 to 15	.....	3.76 to 4.45	6 to 15
Group III: Median.....365	20+	.....	3.42	21+	.....	3.68	21+
Middle 50 per cents.....330 to .419	12 to 30	.....	2.51 to 4.23	12 to 30	.....	3.30 to 4.33	12 to 30
Group IV: Median.....377	14+	.....	4.33	14+	.....	3.685	14+
Middle 50 per cents.....342 to .437	8 to 21	.....	3.20 to 5.30	8 to 21	.....	3.24 to 4.41	8 to 21

GROUP I.—CITIES HAVING A POPULATION OF 300,000 OR OVER IN 1910.										
1 Chicago, Ill.....	\$9,492,789	\$36,614,344	0.259	7	\$6,121,585	1.55	4	2,092,869	\$4.54	9
2 St. Louis, Mo.....	2,798,654	11,977,382	.234	3	1,975,272	1.41	2	665,802	4.20	6
3 Cleveland, Ohio.....	2,374,107	7,494,451	.317	11	806,865	2.94	11	523,187	4.53	8
4 Baltimore, Md.....	1,824,823	7,586,501	.240	5	1,235,921	1.47	3	549,079	3.32	2
5 Detroit, Mich.....	1,706,858	6,099,654	.282	9	803,614	2.12	7	426,592	4.00	5
6 Buffalo, N. Y.....	1,607,378	6,751,968	.238	4	954,176	1.69	5	405,714	3.96	4
7 San Francisco, Cal.....	1,717,249	8,536,968	.201	1	1,412,719	1.22	1	402,836	4.26	7
8 Milwaukee, Wis.....	1,314,257	5,202,614	.252	6	539,275	2.42	8	350,852	3.66	3
9 Newark, N. J.....	1,944,549	6,141,072	.316	10	758,748	2.56	9	322,784	6.02	12
10 New Orleans, La.....	952,247	4,122,356	.231	2	315,865	3.01	12	329,207	2.89	1

GROUP II.—CITIES HAVING A POPULATION OF 100,000 TO 300,000 IN 1910.

11	Washington, D. C.	\$2,055,915	\$7,816,180	.263	8	\$1,109,968	1.86	6	321,128	\$6.40
12	Los Angeles, Cal.	1,288,852	3,657,413	.352	12	441,213	2.93	10	270,491	4.76
13	Minneapolis, Minn.	1,369,481	3,698,710	.370	13	324,278	4.24	13	286,241	4.78
14	Jersey City, N. J.	\$960,225	\$2,809,977	0.342	12	\$544,878	1.76	1	254,286	\$3.78
15	Providence, R. I.	954,168	3,239,020	.265	3	433,262	2.20	5	214,445	4.45
16	St. Paul, Minn.	755,981	2,490,356	.304	7	263,678	2.86	8	207,928	3.64
17	Portland, Oreg.	671,062	1,747,566	.383	14	190,354	3.53	16	178,506	3.76
18	Columbus, Ohio.	734,719	1,734,719	.401	17	263,421	3.41	15	163,625	4.24
19	Toledo, Ohio.	645,916	1,575,393	.385	15	195,597	3.30	13	161,533	4.00
20	Oakland, Cal.	586,014	1,755,781	.333	10	177,529	3.31	14	110,070	5.32
21	Syracuse, N. Y.	584,536	1,927,157	.303	6	192,000	3.05	12	129,574	4.51
22	New Haven, Conn.	556,589	1,663,299	.336	11	249,935	2.23	6	128,747	4.32
23	Birmingham, Ala.	160,318	646,068	.248	2	79,901	2.02	4	62,146	2.58
24	Memphis, Tenn.	288,401	1,369,480	.210	1	154,814	1.86	1	115,107	2.51
25	Scranton, Pa.	532,007	1,108,183	.498	20	91,057	6.06	19	124,810	4.42
26	Paterson, N. J.	524,307	1,328,554	.394	16	176,103	2.98	10	120,188	4.36
27	Omaha, Nebr.	544,819	1,474,331	.371	13	129,037	4.23	17	120,005	4.54
28	Grand Rapids, Mich.	538,899	1,308,373	.412	18	114,305	4.73	18	107,191	5.03
29	Nashville, Tenn.	274,665	910,979	.301	5	107,000	2.54	7	108,768	2.52
30	Lowell, Mass.	429,964	1,338,131	.321	8	149,710	2.87	9	101,908	4.22
31	Cambridge, Mass.	507,322	1,570,390	.323	9	166,957	3.04	11	102,038	4.97
32	Spokane, Wash.	541,795	1,207,288	.448	19	76,363	7.07	20	92,713	5.84
33	Albany, N. Y.	363,556	1,288,255	.282	4	190,864	1.91	3	99,311	3.66

GROUP III.—CITIES HAVING A POPULATION OF 50,000 TO 100,000 IN 1910.

34	Hartford, Conn.	\$535,300	\$1,565,775	0.341	15	\$164,272	3.26	20	95,294	\$5.61
35	Trenton, N. J.	498,423	976,591	.418	30	129,276	3.17	19	91,955	4.44
36	New Bedford, Mass.	331,048	1,145,395	.288	7	137,152	2.42	8	88,222	3.75
37	Reading, Pa.	282,263	707,344	.299	24	67,880	4.18	31	99,441	3.06
38	Camden, N. J.	419,253	1,098,680	.415	29	148,379	2.83	15	90,240	4.65
39	Dallas, Tex.	234,641	714,640	.328	11	74,230	3.16	18	82,464	2.84
40	Springfield, Mass.	505,700	1,386,849	.364	20	123,580	4.08	30	83,107	6.09
41	Wilmington, Del.	235,293	693,921	.339	14	100,947	2.33	6	85,340	2.76
42	Des Moines, Iowa.	495,745	1,058,440	.468	38	83,456	5.94	39	82,561	6.01
43	Lawrence, Mass.	333,398	884,708	.331	12	86,796	3.38	21	79,901	3.75
44	Tacoma, Wash.	263,142	951,484	.382	22	74,993	4.84	34	70,427	5.16
45	Kansas City, Kans.	253,355	604,069	.420	31	66,661	3.80	27	73,107	3.49

TABLE 31.—Showing ratio of expenses of schools to total city expenses and to expenses of police department and expenses of schools per capita of population in 103 cities of 30,000 population and over, 1909—Continued.

GROUP III.—CITIES HAVING A POPULATION OF 50,000 TO 100,000 IN 1910—Continued.

Cities.	Expenses of schools.	Total city expenses.	Ratio of school expenses to total city expenses.	Rank.	Expenses of police department.	Ratio of school expenses to expenses of police department.	Rank.	Population 1908. [Revised estimate.]	Expenses of schools per capita of population.	Rank.
46 St. Joseph, Mo.....	\$269,754	\$695,010	.388	23	\$89,915	3.00	17	77,403	\$3.48	17
47 Troy, N. Y.....	330,346	1,111,899	.298	8	131,821	2.50	11	76,604	4.31	27
48 Utica, N. Y.....	268,806	850,380	.313	10	62,014	4.27	32	70,275	3.82	24
49 Elizabeth, N. J.....	212,509	612,447	.347	18	84,685	2.39	7	68,543	3.10	40
50 Schenectady, N. Y.....	242,238	774,670	.312	9	89,937	2.69	13	67,205	3.61	21
51 Hoboken, N. J.....	360,404	895,041	.403	25	164,438	2.22	5	68,456	3.80	23
52 Manchester, N. H.....	157,726	649,375	.243	4	57,707	2.73	14	68,149	2.32	5
53 Evansville, Ind.....	232,761	531,962	.438	33	67,836	3.46	22	67,721	3.44	15
54 Norfolk, Va.....	144,720	754,300	.192	2	122,133	1.19	4	65,394	2.21	4
55 Wilkes-Barre, Pa.....	221,900	548,227	.404	26	58,174	3.80	28	64,184	3.45	16
56 Peoria, Ill.....	270,458	816,153	.331	12	107,355	2.53	12	61,691	4.39	29
57 Erie, Pa.....	217,215	531,471	.409	27	54,163	4.00	29	63,905	3.40	14
58 Savannah, Ga.....	124,860	512,654	.244	5	119,562	1.04	1	64,338	1.94	3
59 Oklahoma, Okla.....	180,447	415,147	.456	36	26,186	7.23	41	44,779	4.23	26
60 Harrisburg, Pa.....	253,430	570,699	.444	34	48,456	5.23	38	59,863	4.23	26
61 Charleston, S. C.....	103,359	584,649	.177	1	95,682	1.08	3	58,257	1.78	2
62 Portland, Me.....	257,636	900,186	.283	6	56,970	4.52	16	56,970	4.52	31
63 East St. Louis, Ill.....	187,180	542,195	.346	17	77,254	2.42	9	52,751	3.55	20
64 Holyoke, Mass.....	248,410	745,250	.333	13	69,354	3.58	23	54,701	4.54	32
65 Jacksonville, Fla.....	88,088	426,583	.199	3	80,509	1.00	2	48,983	1.74	1
66 Brockton, Mass.....	253,474	705,165	.360	19	67,715	3.75	25	53,443	4.75	34
67 Bayonne, N. J.....	287,089	620,880	.462	37	76,122	3.77	26	50,436	3.70	38
68 Johnstown, Pa.....	183,061	374,439	.490	41	37,086	4.94	35	51,948	3.53	19
69 Passaic, N. J.....	209,331	444,706	.470	39	28,050	7.45	42	48,259	4.33	28
70 Wichita, Kans.....	138,570	337,549	.410	28	28,975	4.78	33	44,642	3.11	11
71 Covington, Ky.....	134,819	390,680	.345	16	55,060	2.45	10	52,095	2.59	6
72 Allentown, Pa.....	162,076	340,929	.475	40	26,068	6.21	43	49,211	3.30	12
73 Springfield, Ill.....	185,208	505,274	.366	21	50,894	3.64	24	47,471	3.90	25
74 Saginaw, Mich.....	241,044	533,814	.451	35	47,528	5.07	37	49,265	4.89	35
75 Canton, Ohio.....	157,771	374,257	.422	32	31,566	4.99	36	47,453	3.32	13

SCHOOL EXPENSES COMPARED WITH OTHER EXPENSES.

GROUP IV.—CITIES HAVING A POPULATION OF 30,000 TO 50,000 IN 1910.

76	Sioux City, Iowa.....	\$201,948	\$422,008	0.478	24	\$37,573	5.37	20	45,391	\$4.45	23
77	Yonkers, Pa.....	137,357	323,539	.424	20	29,074	4.72	16	46,131	2.96	7
78	Atlantic City, N. J.....	184,872	868,251	.213	3	107,485	1.73	2	42,858	4.31	19
79	Little Rock, Ark.....	128,597	335,139	.384	16	43,096	1.98	3	43,589	2.95	6
80	Rockford, Ill.....	163,741	345,805	.473	23	29,550	5.53	22	42,913	3.32	9
81	Bay City, Mich.....	168,233	385,289	.437	21	31,247	5.39	21	43,721	3.85	16
82	York, Pa.....	146,104	287,118	.509	26	23,850	6.11	25	42,591	3.43	11
83	Sacramento, Cal.....	220,688	642,720	.343	10	43,927	5.03	19	41,768	5.28	26
84	Chattanooga, Tenn.....	86,702	428,824	.202	2	62,576	1.39	1	42,525	2.04	1
85	Malden, Mass.....	226,888	589,740	.385	17	46,570	4.87	17	41,996	5.40	27
86	Pueblo, Colo.....	187,326	550,520	.304	5	49,983	3.75	12	41,405	4.53	24
87	Haverhill, Mass.....	184,473	548,459	.337	7	42,376	4.35	15	41,738	4.43	22
88	New Britain, Conn.....	143,210	389,050	.368	12	33,345	4.30	14	40,631	3.60	13
89	Topeka, Kans.....	201,880	381,809	.530	27	25,120	8.04	28	43,357	4.65	25
90	Davenport, Iowa.....	226,280	597,955	.380	15	37,368	6.07	24	41,886	5.40	27
91	Wheeling, W. Va.....	153,298	394,663	.388	18	47,877	3.20	8	41,116	3.73	15
92	Chester, Pa.....	122,064	271,574	.449	22	29,767	4.10	13	37,673	3.24	8
93	Dubuque, Iowa.....	116,346	339,695	.342	8	33,723	3.45	10	39,717	2.93	5
94	Woonsocket, R. I.....	97,801	333,744	.292	4	33,917	2.89	6	35,845	2.73	4
95	Racine, Wis.....	140,916	337,999	.417	19	17,766	7.92	27	35,804	3.94	17
96	Knoxville, Tenn.....	79,215	316,925	.150	1	38,023	2.08	4	35,641	2.23	2
97	New Castle, Pa.....	146,055	296,778	.492	25	22,911	6.38	26	34,867	4.19	18
98	Joliet, Ill.....	117,329	339,880	.345	11	36,475	3.21	9	33,659	3.48	12
99	Auburn, N. Y.....	123,028	381,455	.323	6	33,271	3.69	11	33,844	3.64	14
100	Taunton, Mass.....	142,618	415,829	.343	9	47,266	3.02	7	33,014	4.32	20
101	Oshkosh, Wis.....	107,605	288,184	.374	14	17,901	6.01	23	32,105	3.35	10
102	Joplin, Mo.....	120,347	226,893	.530	28	24,628	4.89	18	27,278	4.41	21
103	Newport, Ky.....	80,409	216,928	.371	13	33,873	2.37	5	29,926	2.69	3

TABLE 32.—Showing average annual cost per pupil, based on enrollment, of instruction, operation, and maintenance of elementary schools, including kindergartens, and of secondary schools and the relation of these costs to each other, in a selected list of cities, 1909.

	Fiscal year ended—	Elementary schools.				Secondary schools.				Rank, cost per pupil.	Cost per pupil—Ratio of elementary schools to secondary schools.	Rank.
		Expenses.	Enroll-ment.	Cost per pupil.	Rank, cost per pupil.	Expenses.	Enroll-ment.	Cost per pupil.	Rank, cost per pupil.			
Group I: Median.....				\$26.54	5+			\$64.39	5+	2.27	5+	
Middle 50 per cents.....				{ 24.34 to 27.65 }	{ 4 to 7 }			{ 57.99 to 71.32 }	{ 4 to 7 }	{ 1.965 to 2.65 }	{ 3 to 7+ }	
Group II: Median.....				24.29	8			48.50	8	1.84	8	
Middle 50 per cents.....				{ 21.745 to 25.775 }	{ 5 to 11 }			{ 40.405 to 53.935 }	{ 5 to 11 }	{ 1.71 to 2.34 }	{ 6 to 12+ }	
Group III: Median.....				21.60	14			49.56	14	2.27	14	
Middle 50 per cents.....				{ 19.43 to 25.50 }	{ 8 to 20 }			{ 43.875 to 54.91 }	{ 8 to 20 }	{ 1.89 to 2.775 }	{ 8 to 20+ }	
Group IV: Median.....				21.71	9			39.98	9	1.90	7	
Middle 50 per cents.....				{ 18.55 to 23.22 }	{ 5 to 13 }			{ 35.70 to 46.46 }	{ 5 to 13 }	{ 1.72 to 2.465 }	{ 4 to 10+ }	
GROUP I.—CITIES HAVING A POPULATION OF 300,000 AND OVER IN 1910.												
1 Chicago, Ill.....	June 30, 1909	\$7,360,704	275,082	\$26.77	6	\$1,073,247	16,616	\$64.65	6	2.41	7	
2 St. Louis, Mo.....	do.....	1,906,210	82,324	23.17	3	407,571	4,569	89.20	10	3.85	9	
4 Baltimore, Md.....	Dec. 31, 1908	1,429,100	76,416	18.71	8	259,859	3,569	72.82	8	3.90	10	
5 Detroit, Mich.....	June 30, 1909	1,299,280	49,394	26.31	5	297,055	3,189	57.24	3	2.18	4	
6 Buffalo, N. Y.....	do.....	1,299,344	57,662	22.51	2	188,330	4,362	45.50	1	2.02	3	
7 San Francisco, Cal.....	do.....	1,332,016	39,717	33.57	10	206,526	3,224	64.13	5	1.91	2	
9 Newark, N. J.....	do.....	1,516,593	53,844	28.19	8	155,729	1,912	81.55	9	2.89	8	
11 Washington, D. C.....	do.....	1,534,037	48,968	31.32	9	386,116	5,525	69.82	7	2.23	5	
12 Los Angeles, Cal.....	do.....	969,739	38,234	25.40	4	256,105	4,356	58.75	4	2.31	6	
13 Minneapolis, Minn.....	Dec. 31, 1908	1,091,649	40,326	27.11	7	251,518	5,311	47.38	2	1.75	1	

GROUP II.—CITIES HAVING A POPULATION OF 100,000 TO 300,000 IN 1910.

16	St. Paul, Minn.	Dec. 31, 1908	\$596,202	25,761	\$23.13	6	\$141,532	2,525	\$55.92	12	2.42
17	Portland, Oreg.	do.	527,444	21,667	24.37	8	82,954	2,028	40.90	5	1.68
18	Oakland, Cal.	June 30, 1909	462,936	14,933	31.10	15	98,017	1,847	52.95	11	1.70
20	Syracuse, N. Y.	Dec. 31, 1908	420,148	16,968	21.00	4	106,611	2,568	41.51	6	1.98
23	Birmingham, Ala.	June 30, 1909	114,305	8,404	13.62	1	34,448	1,029	33.48	3	2.47
24	Memphis, Tenn.	do.	246,388	13,192	18.70	3	22,909	884	25.89	2	1.39
25	Seranton, Pa.	do.	395,503	17,038	23.30	3	101,760	1,391	73.30	15	3.15
26	Paterson, N. J.	do.	426,816	17,752	23.99	7	61,763	1,549	39.91	4	1.66
27	Omaha, Nebr.	Dec. 31, 1908	417,674	16,580	25.20	11	93,587	2,051	45.72	7	1.81
28	Grand Rapids, Mich.	June 30, 1909	410,329	13,923	29.49	14	92,513	1,811	51.15	9	1.73
29	Nashville, Tenn.	Dec. 31, 1908	230,939	15,296	15.12	2	26,948	1,041	25.91	1	1.72
30	Lowell, Mass.	do.	321,391	12,210	26.35	12	58,748	1,214	48.39	8	1.84
31	Cambridge, Mass.	Mar. 31, 1909	346,102	15,399	22.49	5	17,736	1,736	69.40	14	3.08
32	Spokane, Wash.	June 30, 1909	390,794	13,826	28.40	13	119,425	1,860	64.21	13	2.26
33	Albany, N. Y.	Dec. 31, 1908	283,150	11,331	25.13	10	60,669	1,151	52.80	10	2.10

GROUP III.—CITIES HAVING A POPULATION OF 50,000 TO 100,000 IN 1910.

35	Trenton, N. J.	June 30, 1909	\$310,379	12,058	\$25.70	21	\$55,653	808	\$68.87	24	2.68
37	Reading, Pa.	Feb. 16, 1909	219,690	10,208	21.60	14	44,706	904	49.47	15	2.29
38	Camden, N. J.	June 30, 1909	352,139	13,505	26.10	23	45,921	547	83.93	24	3.22
39	Dallas, Tex.	Apr. 30, 1909	109,892	10,908	15.60	2	52,239	994	52.56	19	3.37
41	Wilmington, Del.	June 30, 1909	185,346	9,879	18.76	6	38,994	1,087	35.84	3	1.91
42	Des Moines, Iowa	do.	369,749	14,050	26.30	24	95,656	1,857	51.51	18	1.96
43	Lawrence, Mass.	Dec. 31, 1908	226,178	7,515	30.08	27	36,596	1,651	56.20	22	1.87
44	Tacoma, Wash.	June 30, 1909	257,829	10,161	25.30	20	81,694	1,791	46.60	11	1.80
45	Kansas City, Kans.	do.	173,902	9,620	18.05	4	60,779	1,186	51.40	17	2.86
48	Utica, N. Y.	Dec. 31, 1908	207,405	9,357	22.15	17	38,737	763	50.78	16	2.30
49	Elizabeth, N. J.	June 30, 1909	160,681	8,156	19.70	8	26,936	602	44.76	10	2.27
50	Schenectady, N. Y.	Dec. 31, 1908	191,313	9,103	21.02	11	35,987	764	47.11	12	2.24
51	Hoboken, N. J.	June 30, 1909	287,446	9,864	29.15	25	38,630	396	97.55	27	3.35
52	Manchester, N. H.	Dec. 31, 1908	125,530	5,813	21.62	15	23,650	578	40.23	4	1.86
55	Wilkes-Barre, Pa.	June 7, 1909	176,965	9,243	19.16	7	28,944	1,136	25.47	1	1.33
56	Peoria, Ill.	June 30, 1909	218,850	8,402	26.05	22	29,807	617	48.26	13	1.85
57	Erle, Pa.	June 7, 1909	150,859	7,252	20.82	10	38,265	874	43.79	7	2.11
58	Savannah, Ga.	Dec. 31, 1908	98,394	7,181	13.71	1	17,957	444	40.46	5	2.95
59	Oklahoma, Okla.	June 30, 1909	140,003	7,583	18.47	5	35,935	856	42.00	6	2.28
60	Harrisburg, Pa.	June 1, 1909	183,864	9,148	20.10	9	49,928	902	55.35	21	2.76

TABLE 32.—Showing average annual cost per pupil, based on enrollment, of instruction, operation, and maintenance of elementary schools, including kindergartens, and of secondary schools and the relation of these costs to each other, in a selected list of cities, 1909—Continued.

GROUP III.—CITIES HAVING A POPULATION OF 50,000 TO 100,000 IN 1910—Continued.

	Fiscal year ended—	Elementary schools.			Secondary schools.			Cost per pupil—Ratio of elementary to secondary schools.	Rank.		
		Expenses.	Enroll-ment.	Cost per pupil.	Rank, cost per pupil.	Enroll-ment.	Expenses.			Cost per pupil.	
63 East St. Louis, Ill.....	June 30, 1909	\$150,060	7,017	\$21.38	13	\$21,315	430	\$49.60	14	2.32	18
67 Bayonne, N. J.....	do.	245,017	8,367	29.28	26	24,126	388	62.29	20	2.13	12
68 Johnstown, Pa.....	June 7, 1909	141,030	6,367	22.14	16	32,257	524	61.58	23	2.79	21
69 Passaic, N. J.....	June 30, 1909	161,284	7,244	22.28	19	31,406	349	90.02	26	4.04	27
70 Wichita, Kans.....	do.	108,014	6,650	16.25	3	20,960	757	27.70	2	1.71	2
71 Covington, Ky.....	do.	107,143	4,790	22.32	18	15,809	355	44.57	9	2.00	9
72 Allentown, Pa.....	do.	125,997	5,917	21.30	12	20,914	475	44.04	8	2.07	10

GROUP IV.—CITIES HAVING A POPULATION OF 30,000 TO 50,000 IN 1910.

76 Sioux City, Iowa.....	June 30, 1909	\$160,777	7,035	\$22.84	12	\$28,762	690	\$41.72	10	1.83	6
77 Lancaster, Pa.....	June 1, 1909	100,269	5,381	18.65	7	26,083	602	43.34	11	2.33	9
78 Atlantic City, N. J.....	Dec. 31, 1908	146,379	6,560	22.33	11	29,607	450	65.80	16	2.95	14
79 Little Rock, Ark.....	June 30, 1909	94,655	5,026	16.83	4	19,025	732	25.95	1	1.54	2
81 Bay City, Mich.....	do.	122,539	5,671	21.62	9	35,533	762	46.03	14	2.16	8
82 York, Pa.....	June 10, 1909	112,439	6,000	18.55	5	21,470	609	35.27	4	1.90	7
85 Malden, Mass.....	Dec. 31, 1908	159,706	6,603	24.20	17	54,028	920	58.73	15	2.43	10
86 Pueblo, Colo.....	June 30, 1909	138,833	7,238	19.17	8	34,736	517	67.19	17	3.50	15
87 Haverhill, Mass.....	Dec. 31, 1908	135,472	5,317	25.12	16	30,105	609	44.05	12	1.72	4
88 New Britain, Conn.....	Mar. 31, 1909	97,356	6,546	14.86	10	20,801	557	37.37	6	2.53	12
89 Topeka, Kans.....	June 30, 1909	150,229	5,929	25.33	13	43,534	1,216	35.70	5	1.41	1
92 Chester, Pa.....	June 7, 1909	99,984	4,510	22.19	10	14,098	364	38.75	7	1.74	5
93 Dubuque, Iowa.....	June 30, 1909	89,376	3,550	25.20	14	20,882	533	39.18	8	1.56	3
95 Racine, Wis.....	Dec. 31, 1908	105,778	5,685	18.60	6	26,000	561	46.46	13	2.50	11
96 Knoxville, Tenn.....	June 23, 1909	60,519	5,450	11.12	1	13,580	461	29.48	3	2.66	13
97 Newcastle, Pa.....	June 4, 1909	116,173	4,997	23.22	13	20,799	520	39.98	9	1.72	4
102 Joplin, Mo.....	June 30, 1909	96,816	5,979	16.20	3	16,463	587	27.96	2	1.72	4

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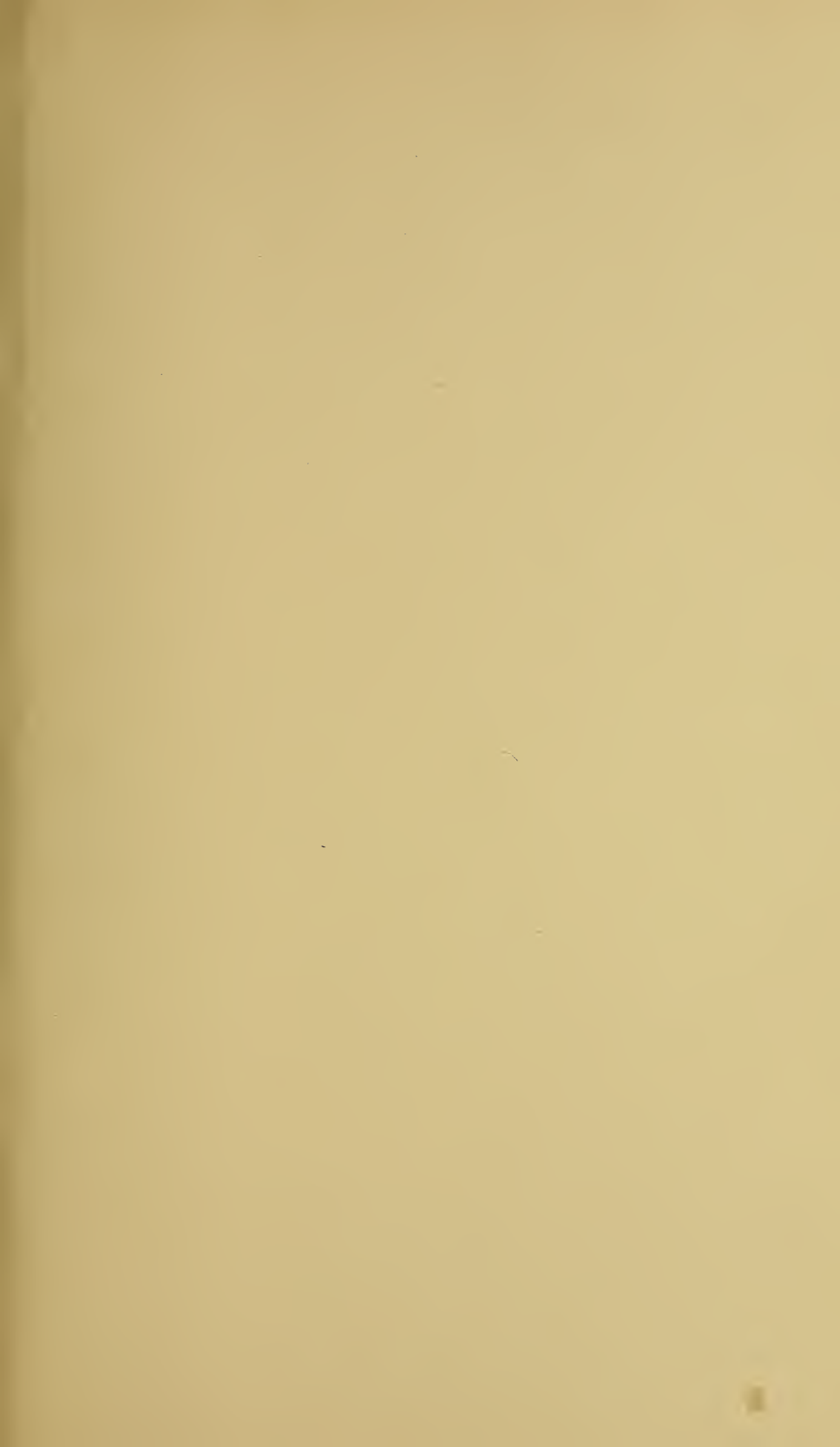
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